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The Business of Negotiation

I have lots of passions, including my better half, life itself and the NAA. Another is reading ... all kinds of reading. My thirst for knowledge comes in part from my mother and father. During childhood, my mother served as a small-town volunteer librarian. From the moment of birth it seems, I had two or three books in my hands, often reading to my brothers and sister, and to friends, as well.

Our son gave me a rather unique paperback for my birthday. You may have seen it on the best seller list: Getting to YES, by Roger Fisher and William Ury. I would recommend it to everyone, especially those in the business of tree care. From owner and spouse, straight through the field personnel, most people will benefit from this book. As the first line of the book's introduction says, “Like it or not, you are a negotiator.”

One of the most interesting perspectives in the book is that our daily routine is filled with mediation—compromising, bargaining, bartering and arbitrating. It is so true that we are taught by example: “You must have a position. Stick to it and you’ll win.” While this method is not always true, it is, nonetheless, considered the “proper” way to negotiate.

Getting To YES suggests a seemingly simple alternative—one that is worthy of serious consideration. Rather than “position bargaining,” which often yields agreements consumed with defending positions rather than working on the issues and concerns of the people involved, this book suggests “principled negotiation or negotiation on the merits.” The authors recommend concentrating on the problem rather than the people involved; considering interests, not positions; brainstorming options before making decisions and declaring the outcome based on an impartial standard. This, the authors say, is the essence of beneficial negotiating.

This new set of principles can eliminate the “we/they” mentality that encourages holding onto ideals despite argument or evidence. This new process cuts down the time necessary to convert information and can raise your expectations for success. By allowing yourself to explore new methods, you and those around you will ultimately benefit.

If you'd like to learn more, or visit with me, please call. Practicing the methods outlined in this book and thinking more about encompassing the larger picture may be reason enough to take a look at Getting To YES.

This “book review” is presented with the intent of answering many of the telephone calls to the NAA from arborist marketing personnel looking for direction or support in convincing their employers to spend more money on marketing, promotion and advertising. My suggestion to this group, as well as others frustrated with less-than-adequate negotiating results, is to explore the contents of this book with open eyes.

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On the Cover
The buffet line is always open for wildlife—if you choose the right plants and maintain them to maximize food production. Photo by Michael Yanny.
The staff of Aerial Lift has extensive experience since 1958 in research, engineering and design of aerial devices. We have an engineering staff member on the ANSI/SIA A92-2 subcommittee to insure the reliability, quality and safety of all aerial lifts, that a common goal of safer, more efficient aerial devices is upheld. Aerial Lift is constantly striving to provide our customers with the latest in aerial devices and the best service in the industry. It is our relentless effort in pursuit of these goals that assures our customers maximized operating economies.

**Aerial Lift Models Available**

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If we are to establish trees in the landscape successfully, we must start with relatively strict planting specifications, then modify them a little for each planting situation. I will dissect the planting process into separate and distinct components—each of which must proceed correctly. If we make a mistake in any one, it may be enough to cause stress that will shorten a tree's life.

Keeping up with the latest research is important for successful planting. I get really upset when I see specs for tree planting that are 20 and 30 years old. People who plant trees must stay current and change their practices to reflect the latest research, some of which I will highlight below.

There has been a campaign going on for the past several years through most of the extension services across the United States called "Right Tree, Right Location." The concept behind the campaign is that it doesn't matter how good nursery stock is—and it doesn't matter how good a job you might do installing that tree—if the tree is not in the appropriate environment, it won't survive. No tree will survive in a raised brick berm without light or water in downtown Manhattan. It's not just the environment, but the size of the tree as well as variations within a site.

Nursery Production Methods

The nursery industry attempts to provide arborists with a good product. Unfortunately, too often they seem to focus on the above-ground part of the tree. Is there a nice straight stem? Do we have wonderful looking canopies? That's all well and good aesthetically, but it doesn't matter how pretty the tree is if the root system can't keep it alive.

There have been a lot of improved production methods in the nursery industry in the past ten to 15 years. It's not just in field production that we're attempting to establish better roots. We're attempting to deal with similar problems with container-grown plants. Some of you may not deal with small, container-grown plants, but big caliper trees are available through container production. In the southeastern part of the United States, you'll find trees being produced in 200- to 400-gallon containers.

Container production

One of the fiercest problems has been distorted, circling root systems that often develop in container production. A flawed root system may come back to haunt us later because it may kill the tree.

I bring this to your attention because, as arborists, you can
influence production through your purchases. You should insist on nursery stock grown using some of the new production methods. Many are hybrid production systems that combine some of the better things from field and container production. Unfortunately, many arborists are not aware of these new methods. What are these new methods?

We’ve approached the problem of circling root systems both mechanically and chemically. Mechanically, barriers in the container may stop roots from circling. Another method puts air holes into the containers, so as the root begins to circle, the tip of it is killed. In effect, the air root prunes it.

Probably the neatest advance came along six or seven years ago, courtesy of Dr. Dan Struve at Ohio State. He began coating the inside of production containers with a copper compound. Originally, those of us who were following his formula were putting copper hydroxide into latex paint and coating the inside of the containers. There is now a product, called Spin Out®, which can be painted or sprayed into containers. One company is now pre-treating its nursery containers with a Spin Out® compound.

With this substance, the roots mine the copper out of the container, and acts as a growth regulator. The copper compound holds the roots in suspended animation until you plant. When you pull them out of the container, that effect is removed and the roots grow out nicely.

Field production

Field-production techniques have changed in recent years, too. One advantage of field production is buffered soil temperature around the root zone, which is much better for tree growth. We also don’t have blow-over in standard field production the way we do in above-ground containers.

One interesting development is called pot-in-pot, which is a container system in the ground. You can’t just stick a container in the ground, of course, because water puddles in the bottom of the pot and begins to rot out the root system. This problem is solved with two pots—one nested inside the other.

The person who really got this going was Charlie Parkerson at Lancaster Farms in Suffolk, Va. I have been amazed at the caliper of trees being grown using pot-in-pot. This method produces excellent caliper trees and wonderful, complete root systems. If you don’t know about pot-in-pot, you may want to investigate purchasing trees produced from that methodology.

We have a big problem in our industry with how field-produced plants are held. No matter what date you plan to install trees, it never seems to happen on schedule. Projects are held up days, weeks or months. How do we effectively hold the trees? That is a question I have been asked countless times—from producers as well as landscapers or arborists installing trees.

What do you do with a field-grown plant, balled and burlapped, sitting around waiting for installation. Do you containerize it? Cage it? Every method has its own problems.

If we containerize them, the nursery industry typically doesn’t remove everything before that plant is installed. They may plant with the wire basket totally intact or leave nylon ropes in place. They may also use a treated burlap, doubled over, which will not break down quickly.

A graduate student and I are doing some very exciting research on this issue. We’ve been shrink-wrapping the root balls in light plastic. We’re very encouraged by the results. The plastic...
keeps the roots cool, they don’t grow through, as with burlap, and we have had no weed growth. We tried a variety of treatments, including healing in trees, containerizing and drip irrigation. This was the only treatment that didn’t have any scorched leaves when we transplanted in the middle of July in Virginia Beach, Va.

### Planting Methods

#### Drainage

We already know we need the right tree for the right location and nursery stock with a decent root system or there’s no point in installing the tree. Before you dig that hole, however, you need to know about drainage at the site. We see far too many urban trees dying because somebody didn’t do a Right Tree, Right Location match-up relative to drainage.

What should you do? We recommend digging a hole and filling it with water. If you’re embarrassed by this, do it late in the afternoon, then come back early in the morning so nobody has to know. Bearing in mind that you’re dealing with different types of soil—from very sandy to heavy with clay—we use a rough guideline that the water should drain away at the rate of at least an inch an hour. If it doesn’t, that should serve as a red flag. Either adjust drainage at the site in some way or change the species of tree.

You can adjust drainage by bringing in some top soil and building a berm. You can also leave a solid soil pedestal on which the root ball can sit within the planting hole. What you don’t want to do (and what a lot of the old tree planting specs recommended) is excavate deeper than the root ball and put the soil back. Why? Because you can’t tamp that soil down as firmly as the existing soil.

Instead, dig the hole only to the depth of the root ball and then leave a pedestal in the center, sculpting down around it. Yes, it’s a lot of work, but you won’t have to come back a year later to replace a dead tree. If you excavate and then replace soil, the tree might sink down when the soil under the root ball settles as the air pockets are driven out. You’ve seen what a tree looks like after this happens—a telephone pole sticking out of the ground.

If you can’t make some physical modification to the site, change the species of the tree. Don’t stick a flowering dogwood into an area with poor drainage, plant a bald cypress or some other tree.
that can tolerate wet feet. You won’t achieve the same landscape effect, I’ll grant you, but the dogwood won’t survive. Arborists must pay more attention to drainage, because planting trees in areas that are too soggy is one of the biggest killers out there.

The larger the hole ...

I am as guilty as anyone of not wanting to dig a hole larger than needed. I will be the first to admit that when I did grounds-keeping work, I eyeballed the root ball and dug a hole. If the plant didn’t want to go into that hole, I did a little tap dance on top until it went down.

Yet clearly, the size of the hole matters. The root system’s normal growth pattern is in a lateral direction. If you’re dealing with nursery stock, there’s no tap root—it’s either gone, because the tree was grown in a container, or it was cut in the field when the tree was dug up. A very wide hole is ideal into which you can put back well-aerated, broken-up, back-fill soil that does not serve as resistance to roots trying to get out.

Arborists should also be aware of a practice in the nursery industry that many on the installation side don’t know about. We still have a lot of nurserymen who are scared of herbicides. They don’t want to use them or they’re afraid of killing their trees by miscalculating the rate. So instead of using herbicides for weed control, extra soil is thrown up against the trunk of the tree through the cultivation process. When that happens, a secondary root system may start to form. Even if a second root system doesn’t form, what you will find is 2 to 4 inches of extra soil on top of the root ball.

Before you start to dig your planting hole, do not measure the depth of that field-dug tree’s root ball until you pull a little bit of burlap back and do a root-crown excavation. Pull the soil back from around the stem and keep pulling it back until you hit the first root. Many times you will find that the root ball has an artificial depth to it and you will need to shorten your hole.

As you’re digging that hole, what do you use? If it’s a small tree, maybe you’re digging it by hand. If it’s a larger tree, you’re probably using an auger or tree spade of some sort. Be careful of any equipment that has the capacity to slick the wall of the planting soil. The more clay in the soil, the more you need to be conscious of this, because the action of equipment can glaze it. We often pull out dead trees with root systems circling in the planting hole—not because they started circling in container production; they started to circle when they hit a glazed wall of soil.

Packaging material

Some synthetic packaging material used by the nursery industry can be a killer. Nurseries have logged so many complaints about root balls breaking down while they’re being held on the job that they’ve switched to synthetics. That’s fine, but not at planting time. While untreated burlap breaks down fairly fast, trees die every day because their roots could not get out through plastic burlap. You’re not going to be able to pull off all of the wrapping material from a large tree in a wire basket, but at least get the top third pulled down to give the tree a chance.

The wire basket has been a raging controversy in our industry for years. Research at the University of Guelph in Canada examined what happens when a root hits the wire. Sometimes it bisects it. The root divides and grows around the wire, then reconnects on the other side.

What concerns me is the top of the wire basket. As we get the word out about drainage and planting trees in shallower holes, we’re left with the loops on the tops of many of the production baskets at the surface level. We backfill over the top and some of the large roots grow through and girdle. Clip the top portion of the basket, pull the burlap away and get rid of those nylon straps.

If you pull the container off and see circling roots, cut them. Making lots of vertical cuts has not proven particularly effective. Instead, cut the major roots that are starting to circle in one or two places.

Amendments & fertilizers

Whether or not to add soil amendments at planting is a controversial
subject. If you have the luxury of preparing the soil for the entire planting area, you can incorporate peat moss, compost and other soil amendments. But with individual planting holes, you don’t want to create a texturally different soil around the root ball compared to the surrounding soil. If you amend the backfill soil only for individual planting pits, you will be left with larger pores in the backfill soil than in the surrounding soil. When this happens, water cannot move back and forth readily.

What about fertilizing at planting time? I realize this is another controversial subject. Every nurseryman fertilizes his liners, yet when that same plant is harvested and planted, we say, “Can’t fertilize it.”

A lot of that reluctance comes from the fact that until fairly recently, products available to our industry were fast-release fertilizers designed for crop production. Those materials have the capacity to dehydrate a root system by pulling the water out. But our industry now has wonderful, slow-release fertilizers.

We use low rates of one pound actual nitrogen per 1,000 square feet. The most important nutrient for roots is not phosphorous but nitrogen. A little bit of nitrogen can be beneficial if used in a slow-release form at a low rate.

**Watering**

All too often on planting jobs, watering does not start until all the backfill is in the hole. Don’t do it that way, please! Water in stages, because you need to settle the backfill soil down, drive the air out and be sure that the ball isn’t going to rock or settle. You also need to rehydrate the backfill soil, which has been losing water since it was removed from the ground.

Dr. Ed Gilman from the University of Florida did some research showing that when you plant container-grown plants, all the water from the root ball can be drawn away into the surrounding soil—often within a couple of hours. Backfill halfway, water, let it drain and backfill the rest. I know some of this can be difficult, but if you can stage your watering so that you break it up, it’s far better for establishment. Continue to water through the next year, sometimes even into the second year. Good slow watering is what the tree’s root system needs.

**Weed barriers**

I had the privilege of doing the largest landscape fabric screening trials in the world with our weed scientist, Dr. Jeff Dirr, a few years ago. [See “Weed Control That’s Friendly to Trees” in Tree Care Industry magazine, March 1994.] I looked at every product on the market, and our conclusion is that landscape fabrics can be beneficial in long-term planting around trees and shrubs.

Our industry was hit with a number of tremendously bad landscape fabrics when these things came out initially. The porosity of the fiber distribution were so spread out that too much light was going through and weeds were still germinating and roots were growing through. The fabrics that still exist for the most part are good ones. They’re expensive, however, and you should be sure you want that as part of your long-term weed control.

**Mulch**

Everybody has a pet name for over-mulching at the base of trees: volcanos, ski slopes, bagels or donuts of mulch. Proper amounts of mulch are important—not just to moderate soil temperatures, conserve water and keep lawn mowers away—but to give the root system a running start without competition from other plants.

Don’t go to excess, though. We recommend two inches for a finer grade material or four inches if it’s a coarser ground material. What you’re trying to accomplish is to block light that would stimulate weed seed germination from reaching the soil surface.

If you prefer mulch or a mulch with herbicide to a landscape fabric, research has shown that with almost all pre-emergent herbicides, your best bet is to put the mulch down first and your herbicide on top. If you have put a thick enough layer of mulch down, that should prevent germination of weed seeds from the soil underneath. What the herbicide attacks is the weed seed that comes in the mulch or blows in. That’s why we put the pre-emergent over the top.

**Pruning**

I still see specs that say, Prune off a quarter to one-third of the top of the tree at planting.” Please, do not do that.

The problem has been that the way that a lot of pruning at transplant was performed was by cutting off the terminal buds. If the terminal buds are cut off, you remove the plant’s natural production site for the auxin that it needs for root production. At planting, pruning should be very limited. Don’t go beyond corrective pruning of broken or crossing branches and very narrow crotch angles.

**Staking and wrapping**

Should we stake? Seventy-five percent of the trees we stake probably don’t need it. We’re not using the right materials, and we’re leaving them on too long. If you have a justifiable reason for staking—wind, vandalism, a top-heavy tree—make sure you remove the staking, or at least the guying, after a year. We have too many trees in this country dying because they’re eating their guying.

Five or six years ago, I looked at all the parts of the planting process and said, “You know, most of this has been researched.” I could find very little research literature, however, regarding whether we ought to put anything on the trunk of the tree at planting time. At about that same time, a tremendous number of trunk-guard products were introduced. I couldn’t believe some of the claims made by some of the manufacturers, so I conducted a study that surveyed arborists across the United States asking if anyone had ever seen damage they could attribute to the use of wraps or guards. I was bombarded. Half of the respondents had seen girdling or constriction damage to the trunk from the use of guards or wrapping materials. About a third said they had seen insects
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under the wraps, and smaller numbers reported diseases and excess moisture.

The decision to use a protective material should be based on a site analysis, microclimate conditions, season, species of tree and type of protection needed.

Inspection the guard frequently to ensure that no girding or constriction occurs, and that no excessive moisture accumulates. Most wraps should be removed after six months to a year. By then the tree should be acclimated to its new location.

Whenever possible use materials that will either biodegrade or photodegrade. Secure them with a material that will either degrade or not girdle or constrict the bark before removal. One material showing promise in my research is a white geotextile (polypropylene fabric) wrap that photo-degrade in six to nine months in Virginia Beach, Va. The wrap is pliable enough that it can be secured by pulling the top end under the last loop around the tree, removing the need for string or tape for securing. Regardless of the reason for using a trunk protective material, there is no point in providing protection at planting if the material used may eventually damage the tree because of improper material selection or non-removal. Timely readjustment or removal is mandatory, for both tree growth and aesthetic reasons.

Conclusion

Most of my work as a faculty member is with the nursery industry, but it dawned on me that just dealing with the nurserymen relative to production and planting methods really didn’t make sense. If those in production, design, installation, maintenance and mature tree care are not all talking the same language, we’re doing ourselves a disfavor. If we’re not all coming from a common base of knowledge, it’s going to hurt all of us.

Dr. Bonnie Lee Appleton is an extension nursery specialist with Hampton Roads Agricultural Research and Extension Center at Virginia Tech. This article was excerpted and adapted from a lecture at TCI EXPO ’97.

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Third Party Training

Your article, “Peaceful Coexistence: OSHA & Tree Care Industry,” was very good and quite complete, except for two sentences on Page 28. Those two sentences read: “You can’t pass safety training responsibilities off to a third party. The employer is responsible.”

The director of OSHA and the NAA’s own lawyer have stated that it is perfectly legal to hire a third party to conduct the required safety training, administer the certification tests and maintain the certification records, although the employer is ultimately responsible. The two sentences in your otherwise fine piece would have been more accurate had they read: You can hire third parties to conduct training, administer tests and maintain certification records. However, as the employer, you are ultimately responsible. The two sentences in your otherwise fine piece would have been more accurate had they read: You can hire third parties to conduct training, administer tests and maintain certification records. However, as the employer, you are ultimately responsible for the quality and accuracy of the training, testing and record keeping. In the first column toward the bottom of Page 25, you state there is not a “specific OSHA standard regulating the tree care industry.” What is 29CFR 1910.333?

Richard E. Abbott
Chief Executive Officer
ACRT Environmental Specialists

On the first point, the wording you suggest is much more clear than ours, thank you. On the second point, we were not clear. What we meant is that there isn’t an OSHA standard (not yet anyway) that addresses the full scope of what an arborist does, an industry-specific standard. 29CFR 1910.333 addresses work situations with electrical hazards. [Ed.]

More on Mushrooms

Liked the article on using your chipper to grow mushrooms. However, the book recommended is only a field guide to wild mushrooms and says nothing about mushroom culture. Here are two that are about culture. The Mushroom Cultivator by Paul Stamets and Mushrooms: How to Grow Them by William Falconer (my grandfather’s book).

Jeff MacNair
Garden State Tree & Lawn

Not Last Word on Leaf Scorch

For many years now I have found your magazine to be a source of good and well-researched information about tree care. In recent months, however, your articles have digressed from the factually based to the speculatively based. This trend became especially clear to me when I read your article this morning entitled “Bacterial Leaf Scorch.” I am concerned that many people who read your magazine will take the drool expressed by the author as the opinion expressed by real experts on the subject, when most arborists confronted by the bacterial leaf scorch problem will take action to preserve the life of the tree.

Most researchers would like to have a cure, but none exists. If you don’t have a cure, the answer to the 200 year old, irreplaceable, infected tree is suppression of the disease, not apathy. For the folks that have an infected tree like this, treatment is the only option. Why didn’t you recommend it?

Expert commentary on a tree disease should be made by plant pathologists, not entomologists. You have made a fundamentally serious error in your research that deserves correction.

The author also suggests that this is not an epidemic. There are many researchers and arborists that have reached the opposite conclusion. The fact is that there are too many trees with the disease and there is a treatment that will suppress it. The use of oxytetracycline has been effectively used against bacterial disease since Filer did his work on elm phloem necrosis in Mississippi in the early ’70s. Since that time, a myriad of arborists and researchers have been successfully using oxytetracycline to control numerous bacterial diseases, including Fireblight, Elm Yellows, Lethal Palm Yellows, Ash Yellows, Peach X Disease, Bacterial Wiltwood, and Bacterial Leaf Scorch. It is interesting to me that the only oxytetracycline product labeled for all of these disease problems (MYCOJECT) was conspicuously omitted from your article.

I expected you to be more responsible for reporting accurate information. I can only guess why you have this bent against Mauget products (as your article on DED clearly demonstrated), but here in the Southeast your bias has not gone unnoticed. You may want to reconsider your bias against them in the future.

I hope this letter will provide some motivation for objective and factual reporting in the future. Put the “Care” back into Tree Care Industry.

Marty Shaw
Tree Injection Products Company, Inc.
Knoxville, TN

Send letters to: Editor, Tree Care Industry, PO Box 1094, Amherst, NH 03031. All letters are subject to editing for style and length.
Team Building

By: Jeffrey Lee, Branch Management, Riverside, CA (909)319-7003

Sponsored by The Bishop Company for the advancement of our industry.

Webster defines “team” as a group of people working or playing together. In past articles in this magazine, you have become familiar with Big Al Fontaine and his number one climber, Max Banyan. Max and Al are a team, but the third, and possibly most important member of that team is the client, whom you have embodied in the person of the ubiquitous Widow Carter.

The Widow Carter is the typical client who wants to get the best possible service for her money - and why not? In exchange for her dollar, she is entitled to a service that represents our industry as professional and knowledgeable.

What does it take to meet the needs and expectations of the Widow Carter? It takes a team.

So, let's build a team. Team building is simply getting a group of people together to achieve a singular goal. Start with a few nice folks that trim trees. Then we have to establish a leader, an individual who is willing to be directly accountable to the client and to his fellow teammates; someone who is willing to set in and take charge of day-to-day operations. Realizing that this one person is incapable of performing all duties by himself, we must surround him with support staff (sales, field, administrative, etc.) and with this realization, training becomes necessary. It is critical that this leader is willing to train his subordinates to possibly, one day, replace him. This would be a fine leader.

Next, we need a couple of well-screened hires who claim they want to do a good job. This is our opportunity to begin a training process that offers a benefit beyond mere monetary gain. Training is knowledge. Knowledge is a possession that cannot be taken away. It is this knowledge that will provide future opportunities which would otherwise be non-existent.

Okay. We have a leader, and we have a trained staff. At this point, I really should point out that training is never ending. The human mind is a living organism, and like all living things, it must be fed - fed information. A regular “training diet” is essential.

Now our cast of characters must share an objective. In this scenario, the objective is to provide professional tree care of the highest standard. Which takes us back to Webster's definition of working together toward that singular goal which, in essence, defines a team.

The reward for the team's unified effort is the tasty profit which will be enjoyed by the whole operation. Realizing that one person is incapable of performing all duties by himself, we must surround him with support staff (sales, field, administrative, etc.) and with this realization, training becomes necessary. It is critical that this leader is willing to train his subordinates to possibly, one day, replace him. This would be a fine leader.

In closing, a successful team is a win-win-win enterprise in which the client benefits, the practitioner earns a profit, and the industry is well-represented.
Difficulties With DOT Article

You’d think with all of my experience with federal regulations and the employees who enforce them, that I’d know better than to trust just one human source of any information. Usually, whenever anything regulatory in nature leaves my desk, it has been checked, checked, checked for accuracy by a number of different sources.

On the other hand, a recent article on Department of Transportation compliance standards entitled, “D.O.T Changes You Should Know About,” which appeared in the August issue, contained mistakes because I didn’t double-check information that came from “the horse’s mouth” during a personal interview.

The process started as a routine review of NAA’s Management Guides. NAA staff members periodically review and update information in the guides. Our Management Guide on HAZMAT compliance was sent to a fairly high-ranking employee of the U.S. Department of Transportation for review. His written response surprised me, so I decided to visit the DOT office and dragged along TCI’s editor, thinking that if there had truly been so many changes in DOT regulations, the new information might make a nice story for TCI magazine.

We had questions on a variety of points. For answers, he read directly from books and quoted several official sources. He told me that a lot of people get confused about DOT rules, and ticked off several of the most common compliance mistakes.

So, based on this interview, the article was written and published. On the bright side, we found out just how many people read TCI from cover to cover. Although I’m well aware that each and every one of our readers didn’t call to point out faulty information, it sure seems that way. Another positive result is that we’ve never had so much open communication with DOT. Many of you did exactly what you should have done ... you questioned your local DOT representative when you saw something that didn’t make sense to you. Be assured your DOT reps called me. Here’s what we found out:

1. NAA’s Management Guides are consistent with Federal DOT rules.
2. NAA’s DOT mantra, “Check your state’s rules” is indeed the critical factor in your compliance success.
3. The Materials of Trade information provided in the original article is correct.
4. There is much controversy over the definition of interstate commerce. As of yesterday, we still had three DOT opinions regarding the accuracy of the published definition: “No, it isn’t right ... Yes, it’s absolutely on target ... Yes, technically it is correct, but we don’t enforce it that way.”

Let me point out here that none of what is being relayed here should, in any way, cast a negative light on DOT. Each of the field representatives I spoke with was extremely friendly and eager to help. The irony here is that when President Clinton ordered the zero-based review of standards and mandated that all standards be written in plain English, this was exactly the sort of trouble he was trying to avoid. Let me also point out that the definition of interstate commerce was the only point resulting in conflicting information from DOT.

As for our original contact, he too had been eager to provide information. After the article was published, he was contacted by some colleagues. He then sent me a fax which clarified a weight class issue surrounding CDLs. I faxed back to him the memo he’d originally sent NAA stating something quite different. We anxiously await his reply.

On behalf of TCI magazine, I apologize for any inconvenience caused by the article. Such drastic changes in information should have been checked more thoroughly. We are grateful to Chip Warren, from DOT’s Kansas City office, for his apology to NAA on behalf of DOT for the misinformation we received. We are appreciative of his help in getting us in touch with DOT public relations specialists, who might be able to write articles about new rules and regulations in the future. We are now in the process of double-checking each compliance point in our Management Guides. We’ll keep you posted as we receive new information, or confirm what we already knew. In the meantime, if you are in doubt about your regulatory compliance status, check with your local DOT authority. Every state has different rules, and it is only through your state office that you can be sure you are receiving 100 percent of the information you need to know.
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Tree Appraisals

By Dick Gooding

Tree appraisals are needed for many reasons. One frequent use, especially related to calls placed to garden centers, nurseries and landscapers, is to determine a replacement price on trees damaged by vehicular accidents.

Most insurance company adjusters have never heard about the Guide for Plant Appraisal. Unfortunately, neither have many nurserymen nor landscapers. Usually the adjuster desires the cheapest replacement plant for the damaged tree. The homeowner is required to secure estimates and so is at the mercy of these nursery quotes. Without following the appraisal process, the homeowner may receive far less or more compensation than is justified.

It would be beneficial to the green industry if garden centers, nurseries and landscape firms adopt the use of the Guide and send one or more key personnel to regional training sessions put on by ASCA or ISA for its use. The other option would be for the firms to develop a relationship or network with local consulting arborists or others who do use the Guide and forward calls to them. The Council is not necessarily interested in developing or increasing a greater number of landscape appraisers, but rather is dedicated to promoting the acceptance and utilization of the Guide as the industry appraisal standard.

Dick Gooding is CTLA representative for the American Nursery & Landscape Association.
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Rope: Choose with care and know the variables

By Peter Gerstenberger

You'll have greater equipment longevity and little or no failure with your rigging if you employ a double fail-safe system when selecting your rigging components and setting up your rigging. Your choice and use of rope is critical in this process.

First, you should make sure that your lowering line is the weakest link in your rigging system. If you have accomplished this, then any failure of the rigging will occur at the weakest spot of your lowering line.

Second, you must determine an appropriate Working Load Limit (WLL—also referred to as Safe Working Load or SWL) for your rigging system to assure that the first scenario—rope failure—never occurs in a critical situation.

In his book, Arborist Equipment, Don Blair refers to the Design Factor (DF) as the variable that allows us to determine the WLL for the rigging:

Max. Breaking Strength ÷ DF = WLL

There is some discretion in determining what the DF should be, but arborists' rigging experience strongly suggests that it should be between 10 and 20.

In extreme rigging situations, where expensive property or lives may be in danger, you should seek out expert advice from a supplier. Generally, a 20:1 design factor will be recommended for these extreme situations.

Your rope has a limited life span. Any time you load it in excess of the WLL you are making its life much shorter!

A 10:1 design factor means that the breaking strength of any rope should be ten times the WLL. For example, a rope with 30,000 pounds (133 kN) breaking strength has a WLL of only 3,000 pounds (13kN) at a design factor of 10:1. Then, to be safe, you must still divide this by two to allow for rope wear and knots. So our 30,000 pounds (133kN) breaking strength rope has a WLL of 1500 lbs (7kN).

There are many external factors that can go into determining what the DF should be, such as the nature of the work, the skill level of the operators and the predictability of the loads. There are many other factors that are characteristics of the rope itself, and these are the focus of the rest of this article.

Where will your rope break?

The most common cause of rope failure is friction meltage.

One spot where this could occur will be at the turn in the hitch or marl used to secure the wood. There are two factors that can cause failure at this point. Fiber breakage due to the bend ratio of the turn (discussed later) and fiber meltage during high-impact loading where the two ropes cross each other.

The rapid slack and stretch movement at the hitch or marl can cause the rope to melt in a split-second! The placement of a protective sleeve at this point of crossing will greatly reduce friction damage and can increase safety during high-impact load rigging.

Friction meltage failure can also occur when running ropes over natural crotches. Remember, it's not just wear and tear you need to worry about in this situation.
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Why did that rope break?

A rope's suitability and useful life for any given rigging application is largely determined by three performance characteristics: tensile strength, working elongation and energy absorption capacity. Of course, the way in which a line is used can affect performance and longevity as well.

Tensile Strength, also called the breaking strength, determines the ultimate strength of the rope, measured in the same direction (in line) as the rope fibers. This is the type of load a line is subjected to when pulled straight.

Working Elongation, also called rope stretch, is a measure of the elasticity of the rope. The total length that a rope will stretch depends on three factors:

1. The percentage of stretch of the particular rope. The percentage of stretch is dependent on the construction of the rope. In general, a braided line stretches less than stranded lines and double braided lines stretch less than single braids.

2. The length of run. The “run” is the distance between two static points of attachment. In other words, the two attachments that hinder the rope from moving. For example, imagine you have two different rigging systems, both with a full load being placed on them: The first uses a lowering device, an arborist block, and a hitched log. The points of attachment are the hitch on the log and the lowering device at the base of the tree. The block isn’t a static point of attachment because it doesn’t hinder the movement of the rope. In this system, the run of the rope is the length between the hitched log and the lowering device. Let’s say this distance is 100 ft (30.5 m). On the other system, a lowering device and arborist block are not being used. Instead the line is crotched in the tree and wraps are taken on the trunk. In this system, the

Large drops and excessive swing is called “dynamic loading.” It is always dangerous!

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friction in the crotch of the tree will actually cause it to act like a point of attachment, so that the run of the line is the distance between the hitched limb and the crotch. Let’s say this is 10 feet (3m). If the rope has a stretch percentage of 5 percent, in the first example, 100 feet (30m) will stretch 5 feet (3m). In the second example, the run of the line will stretch one-half of a foot (15cm).

3. The weight being placed on the line also determines how much it will stretch. The previous example only works if the loads are identical. The greater the load, the greater the stretch.

It is best to use the same size and type of line when two or more lines share a load. Otherwise, one line can stretch, leaving most of the load on the other line or lines.

Energy Absorption is the amount of energy a rope can absorb. In general, ropes that stretch more have a greater capacity to absorb energy. Ropes with a high tensile strength have little stretch so their energy absorption is low. To picture this, think of bungee jumping. The energy from the falling person is absorbed as the bungee stretches. The bungee itself doesn’t have a really high tensile strength but has a tremendous capacity to absorb energy. Compare the bungee cord to an aircraft cable. It has tremendous tensile strength. It takes a whole lot to break an aircraft cable, but would you want to bungee jump with one?

Some stretch is desirable in arborist ropes. That means that rigging systems have to be devised to compensate for rope stretch. To properly use these systems, the proper equipment, experience, and calculations are needed. For example, if you know your rope has a 4 percent stretch, you have 60 feet (18m) of line in the load-bearing run, you can estimate the weight of a limb, and you have 10 feet (3m) of clearance to the homeowner’s roof, can you safely remove the piece? Will you need to take the slack out of the lowering line with a lowering device and/or block and tackle?

Arborists’ ropes are designed to carefully balance these factors. Some stretch is desirable, but a high tensile strength is also needed. This is the reason it is best to stick with ropes designed for arborists. The manufacturers have figured all the physics into the equation and constructed ropes to suit the arborist.

How many times till the end?

The number of times a rope can be subjected to a given load before it fails is a measurable quantity known as Cycles to Failure. This is associated with the WLL. For example, a rope with a breaking strength of 30,000 pounds (133kN) can be loaded at 28,000 pounds of clearance to the homeowner’s roof, can you safely remove the piece? Will you need to take the slack out of the lowering line with a lowering device and/or block and tackle?

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(124kN), a 1.1:1 DF, five times before it will break. The same line can be loaded with a working load of 6,000 pounds (27kN), a 5:1 DF, 750 times before it will break. Decreasing the working load to 3,000 lbs (13kN), a 10:1 DF, will allow you to load the line thousands of times before it will break. Remember, you then divide this number by two, such as 1,500 pounds (7kN) for a 20:1 DF, to account for loss of strength due to knots and rope wear.

**Shock-loading**

So far, all the rope characteristics we have outlined deal with a static rope. When a load comes suddenly on to a slack rope, shock-loading can greatly increase the strain on a line! Shock-loading is also referred to as dynamic loading.

The basic rule here is: the bigger the drop, the bigger the shock! A rough rule of thumb is: for every foot of falling, an object gains a unit of weight plus one. For example: a 500-pound (227 kg) chunk falling four feet will hit the rigging at about 2,500 pounds (1135 kg). Shock-loading damages your rope and may go unnoticed until the rope suddenly and unexpectedly fails! Minimize shock-load by keeping your work as close to the block as possible to avoid a large drop.

**Bend ratios**

Whenever rope is bent, such as when a knot or hitch is tied, an eye splice made or a line is being run through a block, the line is weakened. In a sharp bend, the fibers in the line cannot share the load equally. The bending of your line decreases its WLL and increases the cycles to failure. In short, the more you bend your rope, the shorter its life span will be.

Of course an arborist has to bend a rope for any climbing and rigging operation! To minimize the strength loss to your rope, you must maximize the diameter of the bend. The bend ratio is the diameter of a turn compared to the diameter of your rope and should be no less than 4:1. For example, a 1-inch (25mm) rope turned around a 2-inch (5cm) pipe has a bend ratio of 2:1. This is not an acceptable bend ratio. A 1-inch (25mm) rope turned around a 2-inch (5cm) pipe will sustain excess and uneven strain on its fibers. The rope will be damaged each time this is done, decreasing its cycles to failure, thus shortening its life span!

The bend created by a pulley or block also reduces rope strength and shortens its life. The sheave diameter is the most important one in this case. The sheave is the grooved wheel in the block over which the rope runs. The sheave should be at least four times the diameter of braided rope. This means a ½-inch rope (12mm) should be run over a *minimum* sheave diameter of 2 inches (5cm) and a 1-inch rope (25mm) should be run over a *minimum* sheave diameter of 4 inches (10cm). Stranded rope should actually...
have a greater bend ratio, meaning a larger sheave diameter.

Also, the sheave groove must be wider than the diameter of the rope and designed for use with rope (rounded). Never use sheaves designed for wire rope or V-belts. These types of sheave grooves may have burrs or will pinch the rope, damaging it. In addition, a rigging block should have cheeks that cover the diameter of the rope to protect it from abrasion as it runs over the sheave.

Most rope manufacturers recommend a bend ratio of 8:1. This means a 1-inch rope should be run through a block with a minimum sheave diameter of eight inches. This figure is not practical for tree care. A bend ratio of no less than 4:1 is a more practical guideline.

Knots and hitches cause a loss in rope strength and WLL due to the bend ratios. Strength is lost whenever lines are bent, regardless of the equipment which it is bent. A block, shackle, carabiner, screw link, knot, or hitch all cause a loss in strength and decrease the cycles to failure. If your rigging demands maximum strength, it is better to use lines with splices.

The type of hitch you use with your sling also reduces its strength, whether the sling is fashioned from rope or webbing. First, know the WLL of your sling, then consider how the hitch you choose will reduce its strength:

- The basket hitch provides 100 percent of possible strength because both legs share the load equally.
- A vertical hitch provides 50 percent of possible strength because one leg holds all the load.
- A choker hitch provides 40 percent of possible strength.
- A lashing hitch, such as a timber hitch or cow hitch, provides 35 percent of possible strength.

A working rope often has to be turned over a shackle or carabiner. It is best to use professionally spliced slings with eye-splices to do this. There are important reasons for this: The splice will meet the same testing requirements as the

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TREE CARE INDUSTRY - SEPTEMBER 1998
rope; and, the professional eye-splice will have a WLL rating.

The eye-splice should be at least three times the diameter of the cylinder (bitt, thimble) over which the eye is used to ensure that the bend in the eye-splice is not too sharp.

Applying the “weakest link” rule

All components of your rigging system (the carabiners, shackles, blocks, slings, etc.) should have a greater breaking strength and WLL than your lowering line. When calculating the ultimate WLL of your system, consider how the turns in the load-bearing run of your lowering system (such as through the block and around your lowering device) will reduce its strength. Don’t forget to consider the strength loss resulting from the slings holding the load and the sling holding the block.

Remember that the load on the tree section and sling supporting a block is double that of the load! If you are holding a 500 pound (227 kg) log in the air, you have placed a 1000 pound (454 kg - 4.5 kN) load on the sling, block and section of the tree supporting the load. Failure to understand and consider this simple fact when rigging could have disastrous consequences.

The extraordinarily high tensile strengths of three-quarters, seven-eighths and 1-inch (19, 22, and 25 mm) diameter double braided lines require very careful planning in rigging. A 1-inch (25 mm) double braid, for example, has a tensile strength of 40,000 pounds (178 kN). A 10:1 DF gives the rope a WLL of 4,000 pounds (18 kN). Some arborists have been known to push their 1-inch (25mm) lowering line to 8,000 pound (36 kN) loads (DF of 5:1) and then wonder why their sling, block or lowering device failed. There has been an alarming rise in the number of these incidents. Don’t become part of this statistic!

Remember that every component in a rigging system is a link. With single braid ropes up to 7/8-inch (22mm), it is easy to make sure that the weak link is always the lowering line. With large double braids you have to know what the ratings of all components are and plan accordingly. The lowering line should always be the weakest link, but with the larger double braids, this may mean taking smaller pieces to keep the load in balance with the whole system.

Tensile strength is only part of the story! As we have established, tensile strength is “when it breaks.” In making the decision to choose between a single braid and double braided arborist rope, there are several other factors to consider. As we have discussed, working elongation, energy absorption and the WLL are all extremely important factors to consider. Tensile strength is really only a base number from which the WLL can be calculated.

If you are used to using a 5/8-inch (16 mm) single braid, changing up to a 5/8-inch (16 mm) double braid increases the tensile strength from 9,000 pounds (40kN) to about 16,000 pounds (80kN). If you continue to take the 900 pound (409 kg) loads you’ve been used to taking, you will increase your design factor, reduce the strain on your rope and increase the working life of your rope and rigging. If you decide to replace that 5/8-inch (16 mm) single braid with a double braid and base your design factor on tensile strength only, you will decrease the size of your rope to 1/2-inch (12mm). Although the tensile strengths are the same and the 10:1 design factor remains the same on paper, a reduction in diameter means a reduction in rope fiber which means there is less rope for energy absorption and abrasion resistance, decreasing your margin for error.

Regardless of whether you purchase one of the rigging kits available through some arborist supply vendors today, or select and match your own components, you will be more successful and incur far less risk if you apply the fundamental principles of rigging.

Peter Gerstenberger is director of safety & education for the National Arborist Association. This article was adapted from the companion workbook for use with the NAA’s “Rigging for Removal” video series.
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Team Building

The secret to corporate success is productive employees

By Kevin O'Connor

"...your people can inspire you. Observe them some day. Watch how they care for your customers, watch the little things that they do because you trained them... Team building is a reciprocal thing. It isn't just you doing, doing, doing. Sometimes you have to sit back and observe."

Oliver Wendell Holmes once said, "What lies behind us and what lies before us are tiny matters compared to what lies within us." Good leaders of teams work off that presumption. There is more to a team than what the individual members do. A team has an energy all to itself. One of the ways to create and build that energy is to make sure that you, as team leader, stay very open to what is happening around you. Try to be a little bit more aware of what attributes your team might have.

The goal of team building is producing productive, profitable people. As a business owner or team leader in the tree care industry, half of your job might be technical, but the other half has to do with people—how you work with them... how you collaborate with them... how you serve them. All the technical arboricultural knowledge in the world doesn't help you with people if you can't communicate well. The same is true for leading teams.

Have you ever known people who were really bright or very skilled in the field, yet weren't successful on the job? They weren't successful leading a crew or a district office, and they weren't successful with customers. It's not that they were bad people, they just didn't understand how other people thought and what their expectations were. There are three vital activities for every effective leader: listening, deciding and acting.

Listening

In order to build a good team, you must be a good listener. If your employees think you're not listening to them, there's no reason for them to exist as a team other than to do whatever you tell them, and that's not a team. The hardest thing about listening is putting out of your mind what you think you're going to say. Have you ever been in an argument with somebody and you can't wait for them to shut up so that you can tell them what's right? Try not to formulate your response until they are finished talking.

Try this: At the beginning of your next work day, conduct a quick briefing reminding everybody about what they already know. Get some feedback from them, so that people get a chance to scout out the job site. At the end of the day, do a short after-action review. Ask your employees how the day went. You will learn all kinds of information that will be valuable to you as the leader.

Ask your crew at the end of the day, "If there's one thing I could have done today that would have made this a better project, what would that be?" They'll tell you. Then reward the ones who are courageous enough to be honest and thoughtful. If you don't ask questions, you don't get information.

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gether—to convincing people to support your mission—is to distribute your authority and power. Give it away, don’t keep it all for yourself. If you do your job right, if you make people productive and profitable, they’ll think they own a piece of the business. Everyone who works in your business should be the CEO.

When you give responsibility, people will rise to the task. If they can’t, they’ll let you know very quickly. This way, you’ll determine what level of responsibility you need to assign next time.

If you are skeptical about parceling out responsibility, stop for a moment and think about your business career. Were you absolutely and completely ready for the job you have now? The first time you were given major responsibilities, were you completely ready or did you learn, work hard and rise to the challenge? Give your employees the same chance to advance. Rising to responsibility doesn’t stop at the office door either. Were you completely ready to raise a child when you walked out the hospital door?

When you give responsibility, people have the opportunity to rise to the task. One way leaders do this is by showing interest in others. Employees don’t always want more money, as long as they believe they’re being fairly compensated. What your employees really want is a stake in the action. They want to be involved, have responsibility, feel productive. They want you to show an interest in them.

That’s what teams really want—a stake in the action. They don’t want to be told what to do. They want to do what they know is right, working in conjunction with others in the team. In this way, employees will be the most productive. Of course, in this competitive environment, your company needs productive employees to be profitable.

You want all people to feel equally responsible in carrying out the task. They know you’re the leader, but they want to work with you. When they take on a task, they get a wonderful feeling of accomplishment. They can say, “We did it ourselves.” You can’t pay them enough money to get that feeling.

Remember, too, your people can inspire you. Observe them some day. Watch how they care for your customers, watch the little things that they do because you trained them. Then comment on their efforts and remind yourself that they’re doing that because you led them in that direction. Team building is a reciprocal thing. It isn’t just you doing, doing, doing. Sometimes you have to sit back and observe.

Deciding

The second vital activity for an effective leader is the act of deciding.

Have the courage to say no, have the courage to say yes, have the courage to be imperfect, have the courage to be
yourself. Courage simply means the ability to take one step forward.

Sometimes we take one step forward, then one step back. We go back and forth, looking busy but getting nowhere. This is also called being neurotic. Neurotic people offer a good strong “Maybe” to life. Leaders say “Yes” to life. If they make a mistake, they move again—only in a different way. People are persistent in life by moving forward. They create their success. It’s not because they are smarter than us, or because they have some talent that you and I don’t have, it’s because they know they have to keep moving.

Do you ever have employees come to you as if they were holding a bowling ball? They have a problem and they dump it in your lap. You’re the boss and people expect you to have the answers. Unfortunately, you may think you need to have all the answers and solve all the problems. You don’t.

Here’s a way to manage people that might be easier for you and better for them. When they come in with a bowling ball, take a look at it and say, “Wow you really do have a problem.” Dump it back in their laps. Give them an assignment. Have them talk with colleagues and come back with two or three alternatives. You’ve got enough of your own bowling balls. You don’t need more.

This is called “supervision.” If you take all the bowling balls from employees, they will let you continue to solve all their problems. But that’s not good for you, not good for them and not good for the organization. And it is not helping a team form.

Remember when you went camping for the first time and the bonfire went down and you had to revive the fire. You knew if you got on your hands and knees and started blowing on the embers, it would work. The same thing is true of people—look for their glowing embers.

If you’re managing people you don’t like, move in closer to them rather than fire them. Look for their glowing sparks. And always try to be aware that you have options.

Kets deVries wrote, “The derailment of a CEO is seldom caused by a lack of information about the latest techniques of finance, production or industry; rather, it comes about because of a lack of an interpersonal skill ... the failure to get the best out of people who possess the necessary information.

Incorporate these ideas into your team building techniques. Do it now, don’t wait until you’re good at it!

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Kevin O’Connor, CSP, is a speaker, trainer and corporate consultant who specializes in Person-To-Person skill building. His specialty is Team Building, Communication and Customer Relationships. He is a faculty member of Loyola University in Chicago and is author of 4 books. This article was excerpted and adapted from a lecture at the NAA’s Winter Management Conference.

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TREE CARE INDUSTRY - SEPTEMBER 1998
Calling All Students!

Visit Career Day at TCI EXPO '98

The date for the third annual NAA Student Career Days at TCI EXPO '98 has been established! This year Student Career Days will be held from Thursday - Saturday, Nov. 5-7, 1998 at the Baltimore Convention Center in Baltimore, Maryland. The Job and Internship Fair will be on Friday, Nov. 6.

The spacious Job and Internship Fair ballroom will be the place to meet representatives of the top tree care employers as well as a central meeting place for students from around the United States. As an added bonus, students registering for the Job and Internship Fair receive free admission to EXPO and all seminars!

At last year's Student Career Days students attended educational seminars, live arborist demonstrations and the Career Days Job and Internship Fair. Educational seminars were given by world-known experts, such as Dr. Alex Shigo, tree biologist. The exciting live arborist demonstrations were facilitated by a number of arborist jamboree champions, right on the trade show floor! Students watched as these tree experts demonstrated the latest techniques in tree climbing, rigging for removal, cabling and bracing, and more, all on a full-size tree! All this was absolutely free for students!

Why should an arboriculture student attend Student Career Days when jobs in the industry are so easy to find?

"My advice to a student in arboriculture today is to pick an employer carefully," says Peter Gerstenberger, director of safety & education for the National Arborist Association. "Jobs are plentiful, so the challenge becomes finding a position that best matches your career goals. An event like Career Days exposes you to the big world of arboriculture, it can really broaden your horizons."

Howard L. Eyre, assistant professor at Delaware Valley College in Doylestown, Penn., brought a number of his students to TCI EXPO '97. When asked to describe his students' impressions of TCI EXPO, Howard stated, "One of them has attended three of the EXPOS, and when he walks in, he feels right at home. He's starting to feel he can be part of this industry. They have always been warmly received, unlike other (industry) EXPOS. Everyone wants to talk and interact with them. First-time attendees walk around with their jaws hanging open at first, because they don't realize the extent of the industry. It makes them think about other career opportunities."

The NAA's Student Career Days Competition has been added to the list of events on Saturday, Nov. 7. The competition will take place at an outdoor venue. Two competition levels have been created, so that both degree-seeking as well as vocational job program students can compete. In addition, three-time world champion tree climber Ken Palmer will be on hand to provide individual coaching and instruction. This promises to be a fun day as well as an opportunity to spend more face time with potential employers.

To learn more about how your students can attend Student Career Days at TCI EXPO '98 in Baltimore, Maryland, contact Robert Rouse at 800-733-2622, Fax: 603-672-2613; E-mail: rjr@jlc.net. To learn more about the NAA, visit our web-site at: www.natlarb.com.
Events & Seminars

September 2 - 4, 1998
ISA Florida Chapter’s Annual Conference & Trade Show
Orlando, FL
Contact: Joe Samnik, 813-786-8128

September 7 - 9, 1998
32nd National Arboriculture Conference Technical Seminar and Trade Exhibition
University of Stirling, Scotland
Contact: 011 44 794 368717

September 9 - 10, 1998
Michigan Forestry & Park Assn. (Michigan Chapter ISA)
Summer Meeting
Southfield Civic Center
Southfield, MI
Contact: 517-482-5530

September 15, 1998
“Hazardous Tree Evaluation”
DNR/Forest Service
Riverdale, MD
Contact: 410-768-0830

September 17, 1998
“Mutually Beneficial Solutions to Tree/Utility Line Conflict”
Trees & Utilities Regional Workshop
National Arbor Day Foundation
Kansas City, MO
Contact: 402-474-5655

September 18 - 20, 1998
“Touching Trees: Dr. Shigo ‘On the Inside’”
Dr. Alex Shigo
Paul Smiths, NY
Contact: 518-327-6232

September 18 - 19, 1998
Washington Association of Landscape Professionals
Trade Show & Field Days
King County Fair Grounds
Enumclaw, WA
Contact: 800-833-2186

September 18, 1998
Western Chapter ISA
Annual Regional Meeting
Martin Recreation Center
Anaheim, CA
Contact: 916-641-2990

September 25, 1998
Climbing Skills Workshop
California Arborists Association, Inc.
San Mateo, CA
Contact: Denise Buffham, 707-254-8862

September 27 - 30, 1998
Gateway to a Greener Future
Society of Municipal Arborists 35th Annual Conference & Trade Show
Holiday Inn - Southwest, St. Louis, MO
Contact: Rob Emmett 314-301-1500.

September 30, 1998
“Trees, People and the Law”
National Conference
The National Arbor Day Foundation
Lied Conference Center
Nebraska City, NE
Contact: NAF, 402-474-5655

October 1 - 3, 1998
International Elm Conference
The Morton Arboretum
Oak Brook, IL
Contact: 630-719-2468

October 2 - 3, 1998
Money DOES Grow on Trees
Western Chapter ISA Conference
Tucson, AZ
Contact: Dudley Marburger, 520-792-4669

October 5 - 7, 1998
“Trees, People and the Law”
National Conference
The National Arbor Day Foundation
Lied Conference Center
Nebraska City, NE
Contact: NAF, 402-474-5655

October 6, 1998
Michigan Arborist Association
Insect & Disease I Seminar
Waterford Oaks Activity Center
Waterford, MI
Contact: 800-MAA-4055

October 7 - 10, 1998
31st Annual Conference
American Society of Consulting Arborists (ASCA)
Napa Valley, CA
Contact: Kristine Freund, 301-947-0483

October 8, 1998
Rigging for Removal Workshop
National Arborist Association
Cleveland, OH
Contact: NAA, 800-733-2622

continued on next page
October 8 - 9, 1998
"Micro-Organisms: Understanding Their Role in Tree Life and Death"
Dr. Alex Shigo
Portsmouth, NH
Contact: NE Shade Tree, 603-436-4804

October 10, 1998
Rigging for Removal Workshop
National Arborist Association
Eastport, NY
Contact: NAA, 800-733-2622

October 14, 1998
Michigan Arborist Association
Insect & Disease II Seminar
Waterford Oaks Activity Center
Waterford, MI
Contact: 800-MAA-4055.

October 16, 1998
Equipment Maintenance
California Arborists Association, Inc.
San Mateo, CA
Contact: Denise Buffham, 707-254-8862

October 17, 1998
A National Day of Service
National Arborist Association
Arlington National Cemetery
Washington, DC
Contact: Mark Garvin, 800-733-2622

October 18 - 20, 1998
NE Chapter of ISA Annual Meeting
Burlington Radisson
Burlington, VT
Contact: 217-355-9411

October 23 - 25, 1998
73rd Annual Meeting & Tree Expo
New Jersey Shade Tree Federation
Pleasantville, NJ
Contact: Bill Porter, 732-246-3210

November 5 - 7, 1998
TCI EXPO '98
National Arborist Association
Baltimore Convention Center
Baltimore, MD
Contact: 800-733-2622

November 10 - 13, 1998
Turf & Grounds Exposition
New York State Turfgrass Association (NYSTA)
Syracuse, NY
Contact: NYSTA, 800-873-8873 or 518-783-1229

November 14 - 17, 1998
"Top the Charts with PLCAA"
19th Annual Lawn & Landscape Conference/Green Industry Expo
Professional Lawn Care Association of America
Opryland Hotel Convention Center
Nashville, TN
Contact: PLCAA (800-458-3466)

November 17, 1998
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IRS Raises Bar on Payroll-Tax Deposits

Good news from the government! The Internal Revenue Service has eased the rules that require some small businesses to make payroll-tax payments every month. The dollar thresholds will be going up, so many more tree care firms should be released from the law. The new rule, which took effect for quarterly returns on July 1, 1998, and takes effect for annual returns at the beginning of next year, requires monthly deposits only by firms with $1,000 or more in employment taxes (Social Security, Medicare, withholding tax) for the return period—a quarter or a year. The previous threshold for monthly payments was $500.

The IRS estimates that the new rule will lift the burden of monthly payments from about 500,000 small firms. The total number of companies not required to make monthly payments will reach about 2.1 million, or one-third of all U.S. companies.

Advertise Truth...

Don’t Mislead With “Technically True”

Do you ever check the Yellow Pages for truth in advertising in the tree care industry? Many tree care companies advertise their professional affiliations, complete with logo, ranging from the National Arborist Association and International Society of Arboriculture to state associations or similar groups. Not all are legally entitled to advertise membership. Some are former members and others have never been affiliated with the organizations whose logo they tout in their advertisements. Most professional organizations police trademark infringement for the simple reason that losing control over a trademark could cause an organization to lose control of its reputation. A loss or dilution of an organization’s standing could be deemed an irreparable harm subject to monetary damages.

These professional organizations have a right and an obligation to their members in good standing to enforce proper use of their trademarks. If you suspect that a tree care company in your area is engaged in false advertising, call the organization in question. They cannot monitor every ad in every publication nationwide.

Irreparable harm is also possible in cases of misleading advertising. Even if the advertisement is literally true—but could give the public a misleading impression—the same legal liability could apply as with false advertising. Before you promote your expertise, affiliations or services, consider whether any statement may confuse clients or lead them to draw a false impression.

Don’t take chances on this point. If found guilty, you could be ordered to pay for advertising to clear up the confusion you created and make restitution to the injured party.

More Delays on Electronic-Filing

It’s happening again. The Internal Revenue Service has extended the deadline for small and mid-size businesses to file their federal income and payroll taxes electronically one more time.

The agency extended the deadline to Jan. 1, 1999, from June 30, 1998. Until the new deadline date, the IRS will not impose penalties on firms continuing to use paper forms to make payments at their banks. The electronic-filing requirement applies to businesses with $50,000 or more a year in federal income- and employment-tax deposits. The requirement was originally scheduled to take effect July 1, 1997.
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An Industry Story
That Needs to Be Told

By John Hushagen

It started as a routine call to our office in mid-November 1997. The man on the phone wanted a bid to remove one repeatedly-topped hawthorne tree from his planting strip and two hawthornes in the same condition on his next door neighbor’s planting strip. Our salesman made an appointment to meet someone at the man’s house within a few days. The man’s goal was to replace the hawthornes with new trees that would not grow up and block a very desirable view.

Our salesman kept his appointment and met with someone that was either the man’s girlfriend or wife. A written bid to remove a total of three trees and stumps was prepared and left for consideration. One day later the man called the office, spoke with the salesman, and authorized us to proceed with all three removals. When we asked him if he had permission to remove the neighbor’s trees, he assured us he did and there was no problem. We told him that we had a six to eight week backlog of work and we would contact the proper officials from the City of Seattle to obtain a tree-removal permit. We told him we would contact him when the job was scheduled. At this point, we had only a verbal okay to do the job and nothing in writing from either the man, his girlfriend or the neighbor.

On Monday, Dec. 29, I realized I had an opening to do this job while I had equipment in the same part of town. I phoned the man at his home phone number and left a message that we would arrive at approximately mid-morning on Dec. 31. I received no return call. My crew went to the properties at the scheduled time and removed all three trees and stumps. Then, all hell broke loose.

The first confrontation was with the neighbor who came home from work at noon to find her two trees cut to firewood. She claimed she knew nothing of this intended work and had never given her neighbor or anyone else permission to remove her trees. Later the same day I received an irate call from the man’s girlfriend next door wondering why we had removed her tree without permission. This had turned into every tree service’s worst nightmare.

Within days I learned that the man we had dealt with in mid-November had broken up with his girlfriend and moved to a nearby town. He was on vacation in Maine when we called to say we were coming. He had moved out without telling his ex-girlfriend or his neighbor that he had made a deal with us to remove three trees. He never phoned our office to cancel the order. When we questioned him about his role in this terrible misunderstanding, he lied and stated he never gave us the order to proceed, and then hung up on us whenever we called back.

Eventually this man paid his one-third of the bill, but the neighbor was not easily satisfied. She immediately threatened legal action. I responded by offering to plant two new trees of considerable size to replace the butchered trees we had removed.

Several months went by before she sent me a letter with a copy of an arborist’s value loss appraisal. Although the consultant never saw the standing trees, and only examined photographs, trunk remnants, and a letter from a landscaper that stated the trees had been thinned once since the last topping, he came back with a value of $1,000 per tree. The consultant claimed that the condition rating of the topped trees
he never saw was 60 percent!

Based on this appraisal, the neighbor wrote me a letter demanding that I pay $2262.50—$2,000 for the two trees, and $262.50 for the appraiser’s fee. I responded with my original offer, but added the $262.50. She rejected my offer and sued me in Small Claims court for $2,500. My final offer was $1,262.50 cash, and I continued to try to settle the claim through mediation, but the neighbor rejected all offers. I hired my own tree appraiser who claimed that the value of the trees was $375 each.

I headed to court facing a lawsuit for the first time in nearly 11 years of business. I knew I would have to pay something, but I hoped the judge would understand that an honest mistake was made, and that there was no way these trees were worth $2,000. I lost the case as the judge decided in favor of the plaintiff. I ordered my company to pay $2,500, plus court costs and a filing fee. I was stunned and angry—stunned that there had been no compromise and we had been given 100 percent of the blame, and angry at the consultant whose inaccurate values gave the neighbor a reason to take her case to court.

What is there for all of us to learn from this?

1. Try to get every authorization in writing, especially if the work involves removing or pruning trees not on the client’s property.

2. Get written permission from the neighbor whose trees will be pruned or removed.

3. Get the name, address and phone numbers of all parties involved in the work.

4. Never show up to do work after leaving only a voice-mail message. Wait for a confirming phone call.

5. Beware of consulting arborists who want to act like lawyers!

The potential pitfall for any consultant is to move from a finder of fact to an advocate for the client’s position. Too many consultants want to please their clients by rendering opinions favorable to the client’s side—especially when billable hours are the only source of income. The consultant’s job is to find the facts and advise, and nothing more. Advocacy is the lawyer’s job.

When I initially received this consultant’s report, I took issue with the high condition rating for a topped tree. Every consultant colleague I spoke with stated that 60 percent was way too high for a topped tree, especially one that the appraiser had not seen! This arborist’s figures would not stand up to peer review, but they held up in court! My only recourse is to sue the man and woman with whom we originally dealt to try to recoup my losses. This is a true story. Don’t let it happen to you.

John Hushagen of Seattle Tree Preservation, Inc. has been a member of the National Arborist Association since 1988.
**PRODUCTS & SERVICES**

**Husqvarna Forest & Garden Company** recently introduced its new Series 300 family of five chain saws. Each saw has a specialized application, including Model 350 which bridges the gap between homeowners and professionals. The differences between the five new models are driven according to application and use. The 346XP and 351 are built with the most demanding, professional users in mind. Both are constructed with magnesium crank case for increased structural toughness and integrity. Their high power-to-weight ratio helps lessen fatigue. The three other models are designed for commercial users and demanding homeowners. For more information, contact Husqvarna Forest & Garden Company, 9006 Perimeter Woods Drive, Charlotte, NC 28216.

Please circle 91 on Reader Service Card

**Growth Products, Ltd.** has introduced four new products. Starter Plus 8-32-5 with 50% Slow Release Nitrogen is a high-phosphorus solution ideal for newly-seeded or hydroseeded areas. All Season K (8-4-24) with 50% Slow Release Nitrogen and .25% Iron is formulated for year-round fertilization and provides high potassium-to-nitrogen ratio for problem turf areas. Organic Iron 5% Sugar Acid Chelate is extremely stable and more effective than EDTA in higher pH soils where minor elements are often bound up. For soil and water applications where pH needs to be lowered to an acidic range, pH Reducer Citric Acid Solution with Wetting Agent is natural, environmentally sound and has no adverse effects on microflora. For more information, contact Growth Products at 800-648-7626; Fax: 914-428-2780; E-Mail: PRinquiry@GrowthProducts.com

Please circle 90 on Reader Service Card

**Brute Manufacturing Corporation** has announced a new line of conveyors which are simpler, more rugged and "top driven" by hydraulic motor. Six models range from 12 to 32 feet. Raised heights are suitable for half-ton pickups to 15 cu. yd. trucks and are easily towed. For more information, call Brute at 1-800-261-9301.

Please circle 93 on Reader Service Card

**BioSafe Systems’ ZeroTol Broad Spectrum Algaecide/Fungicide** has recently been EPA-registered chemical for the treatment and control of algae, fungi and bacteria on ornamentals and turf. Using an oxidation reaction, it quickly and effectively kills on contact. Most importantly, it kills spores on contact, thereby reducing the potential for reinfection caused by dormant spores in the growing environment. Environmentally friendly, ZeroTol has a zero hour REI and does not use or produce toxic residues. For more information, contact BioSafe Systems at 660-657-2211 or 888-273-3089; Fax: 860-657-3388; E-Mail: biosafe@snet.net; http://biosafesystems.com

Please circle 94 on Reader Service Card

Studies by Bayer Corporation have revealed that applying Merit with the Kioritz soil injector, manufactured by Kioritz Corporation in Japan, requires a fraction of the water needed for conventional power soil-injection treatments. The Kioritz eliminates the need for power spray equipment. This method is most effective in spring and fall, when soil moisture is higher, making it easier to insert the injector tip and enhance penetration to the root zone. Merit is a systemic insecticide that controls pests by contact. For information, contact Bayer at 816-242-2000.

Please circle 95 on Reader Service Card
STAHL introduces the Ultrahoist, a new line of heavy-duty conversion hoists to be used with Arbortech Chip Bodies and Utility Tree Vehicles. At the initial introduction, the hoists will fit bodies 9-feet to 16-feet long with two more models following to fit almost any dump application. The Ultrahoist features maintenance-free, lifetime-tested bearings at all pivot points, even the rear hinge, making it the first totally maintenance-free hoist line on the market. Adjustable subframes will accommodate the full range of chassis sizes and equipment configurations. Dozens of features reduce installation time and eliminate repairs and maintenance, including: integral, twin safety props with self-storing handle, fully enclosed control options, wide frames and close fitting pivots, interchangeable cylinders, and a pedestal-type rear hinge. The result of these innovations is decreased down time for maintenance and repairs while loads may be dumped faster for increased profitability. For more information, contact STAHL, 3201 West Old Lincoln Way, Wooster, Ohio 44691-9956. Phone: 330-264-7441.

Vermeer Manufacturing's new SC1102A stump cutter turns some of the toughest stumps to chips in minutes with cutting edge stump removal technology. Packing the most power in Vermeer's premier line of stump cutters, the 106 hp stump cutter features Vermeer's patented Auto Sweep system. The system maintains the rated engine speed of the stump cutter by adjusting the feed rate of the cutter wheel. By maintaining rated engine speed, the operator is ensured the stump cutter will deliver maximum horsepower and high productivity to cut up to 25 inches (64 cm) deep and 88 inches (224 cm) wide. And with Vermeer's patented beltless cutter wheel drive system, operators get the efficiency of mechanical drive without engine side load. The SC SC1102A is powered by a Perkins 1004-40T turbo diesel engine that has been mounted lengthwise—in line with the drive train—providing a compact, 85-inch (216 cm) profile. For more information, contact Director of Dealer Support & Sales, Brian Metcalf, or International Sales Manager, Daryl Bouwkamp at Vermeer by calling toll free at 1-888-VERMEER (837-6337).
Dennis R. Tracy, co-owner of Bandit Industries, Incorporated, passed away on July 15, 1997 at the age of 56. On July 9, 1998, almost a year from the day he left his friends at Bandit, he returned in the form of a crimson maple tree planted in his memory.

The unveiling of the maple was blessed with warm temperatures and blue skies as friends, family and employees gathered to pay tribute to the man who meant so much to them and to Bandit Industries.

"Not a day goes by that we don’t think about Dennis or refer to him in one way or another," stated Jerry Morey, owner of Bandit Industries. "I think it’s fitting that a maple is the center of this memorial because its limbs are strong and inviting, just as Dennis was."

Mike Morey, Sr., owner of Bandit Industries, remembered his friend and business partner: "He is part of the reason we are all here. And I don’t think we’ll ever forget that. Dennis was a great guy."

Dennis’s wife, Georgia Tracy, concluded the memorial by saying, "To Dennis, a tree planted in his honor here at Bandit would have been greatly appreciated. He loved and cherished everything about this place. And when he got too sick to come in often, it was the hardest thing for him to go through. To have this tree planted here is a continuation of life and I can’t think of a better place for life to continue for Dennis Tracy."

The maple, purchased by employees, stands atop a landscaped retaining wall, ready to greet everyone who passes by.

It is clear to see that "D.T." as so many of his friends called him, was loved, respected and admired. His employees describe him as being highly respected, persevering, caring, warm and passionate. Dennis is survived by his wife, Georganna; two sons, Christopher E. Tracy, and Thomas G. Tracy; two daughters, Dawn Marie Gershon and Denise Laboe; five grandchildren, Adam, Rachel, Tracy, Andrea and Jason; a brother, Thomas Tracy; and a sister, Frances Tracy.

Dennis touched the lives of so many, not only at Bandit but among the entire industry as well. Everywhere he went, he made countless friends, adding to the long list of lives he touched at various trade shows and other industry functions. Dennis was highly involved in the National Arborist Association for nearly 20 years, serving on the board of directors and as Chairman of the Associate Members Committee.

Those who knew Dennis best will obviously miss him the most. But those who knew him little or not at all truly will miss never having known the man.

MTI Acquires TECO

Van J. Walbridge, president of Westminster, Co.-based Mobile Tool International, Inc. (MTI) and Bruce E. Dammeyer, president of Fort Wayne, Ind.-based TECO, Inc., announced the signing of a letter of intent whereby MTI has agreed to acquire all the business and assets of TECO. Both companies are manufacturers of truck-mounted aerial lifts servicing the tree care industry. MTI, which currently employs over 650, plans to continue to operate TECO at its Ft. Wayne; Birmingham, Ala., and Honeybrook, Penn., facilities and intends to eventually move production of some electrical utility products from Westminster to Ft. Wayne. MTI has had its own manufacturing facility in Ft. Wayne since 1989. Presently employing 22, the plant assembles lifts for the telecommunications market. There are no immediate plans to combine the operation with TECO’s 230 employees.

Callbacks

Tool & Supply Directory Update:

- Aerial Equipment, Inc., in Wheeling, Ill., should have been identified as an NAA Associate Member. The company can be reached by calling 847-398-0620.
- West Coast Shoe Co./WESCO should have been listed in the following categories: Arborist Supplies; Climbing Gear; Clothing; Personal Protective Equipment; and Footwear & Accessories. Contact Roberta Shoemaker at 800-326-2711.
Day After Day, Year After Year, They Just Keep Working.

Dependable. Easy to maintain. Built to work hard and never take a day off. Altec's complete line of tree care equipment provides you with superior performance and maximum productivity. Our LR Series and LB Series aerial devices combine smooth, efficient maneuverability with working heights to 60 feet, making them the tree care industry's preferred choice. Altec's line of Whisper Chippers are designed with a commitment to excellence and have a proven record of durability and performance. And all Altec equipment is backed by an unsurpassed warranty.

Give us a call for more information. 1-800-958-2555.

See us at TCI EXPO '98!
Arborist employers whose employees work within ten feet of any over-head, energized conductors have a regulatory as well as a moral obligation to train them on how to recognize and deal with the hazards unique to electricity.

The National Arborist Association (NAA) is offering a day-long Electrical Hazards Awareness Program (EHAP) Workshop in conjunction with TCI EXPO '98 in Baltimore to orient arborists to electrical hazards and start them on the path to more learning.

Please note that there are three ways to register for the workshop:

♦ If you simply want to gain greater awareness by virtue of attending this day-long workshop, the workshop-only registration cost is $40, and it includes a handout.

♦ If you want to attend the workshop and enroll in the NAA's EHAP home study course, or you simply want to obtain a copy of the EHAP program for reference, the registration cost is $100. The EHAP program alone normally costs $135 for non-NAA members.

♦ If you have completed the NAA's EHAP within the last year and are eligible to take EHAP renewal training, you may purchase your renewal with your registration for a total cost of $60. Call the NAA at 1-800-733-2622 or check with your employer to see if you are eligible for renewal.

For more details or to register, please see the EHAP Workshop ad on the facing page.
WHY YOU SHOULD ATTEND!
A Full-Day Workshop

- Comply with OSHA regulations!
  Take an OSHA-recognized training curriculum

- Face with confidence, the most pervasive safety issue in the tree care industry... ELECTRICITY

- Be aware of legal requirements as well as common sense

- Demonstrate proficiency in specific safety training and operational requirements as dictated by safety standard ANSI Z133.1

- Further your training through NAA's Electrical Hazards Awareness Program

Please circle 44 on Reader Service Card

REGISTER TODAY!
Call: 800-733-2622
Fax: 603-672-2613
Mail: NAA PO Box 1094, Amherst, NH 03031

WORKSHOP

Baltimore Convention Center, Baltimore, MD
Wednesday, November 4, 1998
9:00 am - 4:00 pm
Room 349 / 350
Lunch not included

Workshop Cost:

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<tr>
<td>Basic Workshop</td>
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<tr>
<td>EHAP Renewal &amp; Workshop</td>
<td>$60</td>
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<tr>
<td>EHAP Manual &amp; Workshop</td>
<td>$100</td>
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<td>Additional Employees:</td>
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Total $__________

Payment Method:  
- Visa / MasterCard  
- Check Enclosed

Account # ____________________ Exp. Date __________
Cardholder's Signature ____________

Cancellation Policy: Cancellations received on or before 10/23/98 will receive a full refund minus a $10 administrative fee. Fees will not be refunded after 10/23/98. However, a substitute may attend the workshop.
Useful Internet Sites for Arborist Equipment, Services & Supplies

ACRT, Inc.
askacrt@acrtinc.com
http://www.acrtinc.com

ADI Pruning Tools by TOL Incorporated
toline@aol.com

Aerial Lift, Inc.
aerialinfo@aol.com
http://www.aeriallift.com

Agape Designs
Agapetree@msn.com

Altec Industries, Inc.
http://www.altce.com

American Arborist Supplies Inc.
arborist@inet.net
http://www.arborist.com

American Chainsaw & 2 Cycle Inc.
Brian@arboristequipment.com
http://www.arboristequipment.com

The American Group - Samson Div.
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http://www.arborcom.on.ca

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jong@gateway.net
http://www.arboristdirect.com

ArborMaster Training, Inc.
ArborMastr@aol.com
http://www.ArborMaster.com

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http://www.arborssystemsllc.com

Arbortech
http://www.aip.com/arbortech

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http://www.bbaileys.com
http://www.arborists.com/BAILEYS/baileys.htm

Bandit
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http://www.banditchippers.com

Ben Meadows Company
Mail@benmeadows.com
http://www.benmeadows.com

Big John Tree Transplanter Manufacturing Company, Inc.
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http://www.biginjohn.com

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http://www.vanladder.com

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burope@earthlink.net

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J.P. Carlton Company/Div. DAF, Inc.
http://www.stumpcutters.com

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WAC Hort@aol.com

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info@growtech-inc.com
http://www.growtech-inc.com

Haimbaugh Enterprises Inc.-Tree Feeder Div.
dclee@compuserve.com
http://www.treefeeder.com

The Hartford
http://www.thehartford.com/arborists

Hidro-Grubert
resource@travelin.com

Husqvarna Forest & Garden Company
SteveHusky@aol.com
http://www.husqvarna.com

IML- Instrument Mechanic Labor, Inc.
sales@mindspring.com
http://www.imlusa.com

Independent Protection Company
ipc@netbahn.net
http://www.netbahn.net/ipc

Check out the National Arborist Association at:
http://www.NATLARB.com
**FIREWOOD PROCESSING EQUIPMENT**

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<tr>
<th>LOG SPLITTERS</th>
<th>CONVEYORS</th>
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<tr>
<td><strong>LIGHT PROFESSIONAL MODELS</strong></td>
<td><strong>NEW DESIGN TOP-DRIVE HYDRAULIC CONVEYORS</strong></td>
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<td>FROM $2,845</td>
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<tr>
<td>3-Point Tractor-Mount PTO - Powered Models</td>
<td>12, 16, 20, 24, 28 &amp; 32 FT LENGTH</td>
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<td>Available</td>
<td>From $1,495</td>
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<tr>
<td><strong>MID-SIZED PROFESSIONAL MODELS</strong></td>
<td><strong>ORIGINAL BRUTE CONVEYORS</strong> FROM $4,675</td>
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<tr>
<td>Heavy Duty Beam, Standard 4-way wedge</td>
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<tr>
<td><strong>LARGE PROFESSIONAL MODELS</strong></td>
<td><strong>LOG-LENGTH FIREWOOD PROCESSORS</strong></td>
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<tr>
<td>From $4,775</td>
<td>SELF-POWERED From $18,250</td>
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<tr>
<td>3-Point Tractor-Mount PTO - Powered Models</td>
<td>PTO-POWERED FROM $14,500</td>
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http://www.willmanearthdoctor.com

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http://www.totalpower.com

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http://www.woodmizer.com

Wood/Chuck Chipper Corporation
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TREE CARE INDUSTRY - SEPTEMBER 1998
Quality Pre-Owned Aerial Lifts and Digger Derricks

95-3359 1989 GMC 7000 diesel chassis, F5-3005A trans., air brakes, with an Altec AN755 (0888-U0161), 60 ft. working height, two man, end mount platform, over rear axle mount, service line step body. **In Process.**

95-1836 1984 Ford F700 diesel chassis, manual 5/2 trans., air brakes, with Hi-Ranger 5F-52PB1 (11757871), 57 ft. working height, one man, end mount platform, over rear axle mount, service line body. **$36,000.00**

95-3261 1992 Ford F800 diesel chassis, 5/2, AB, with an Altec LB650 (0292-S0844) 55 ft. working height overcenter aerial lift, full dump body, lower boom isolator. Unit in process of refurbishment. **PTBD**

95-2177 1982 Ford F700 gas chassis, 5-speed, hydraulic brakes, with an Asplundh LR-50 (826789) 55 ft. working height behind cab mount, pony motor, dump body, one-man side-mount platform. Aerial has been refurbished and is RTW status. **$34,000.00**

95-2076 1991 Ford F800 diesel chassis, 5/2, with an Asplundh LR50 (910125) 55 ft. working height, overcenter operation, lower boom insert, mounted behind the cab, full line body. Aerial has been refurbished and is RTW status. **$52,500.00**

95-3002 1985 Ford F700 diesel chassis, manual 5/2, hydraulic brakes, with a Hi-Ranger 5F-52PBRI (28512888), 57 ft. working height behind cab mount, dump body, with one-man end mtd. **$24,000.00**

95-3187 1991 Ford F800 diesel chassis, 5/2, with an Asplundh LB650 (900705), 55 ft. working height, dump body. Aerial has been refurbished and is RTW status. **$52,500.00**

Fourty-Two (42) 1984 Altec AN755P's. Each of these units have: 60 ft. working height, single handle control, lower boom isolator, single, two (2) man platform and liner, full steel, line body, all are mounted on either Ford or GMC diesel chassis 33,000 GVW, 215 hp Caterpillar 3116 or 210 hp Ford FD 1060, All have automatic transmissions (either MD3060 or MT653), No-spin rear ends, Air Brakes.

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<th>Company</th>
<th>Address</th>
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<tr>
<td>Additional Employees</td>
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Team Building

By: Jeffrey Lee, Branch Management, Riverside, CA  (909)319-7003

Sponsored by The Bishop Company for the advancement of our industry.

Webster defines “team” as a group of people working or playing together. In past articles in this magazine, you have become familiar with Big Al Fontaine and his number one climber, Max Bunyan. Max and Al are a team, but the third, and possibly most important member of that team is the client, whom you have embodied in the person of the ubiquitous Widow Carter.

The Widow Carter is the typical client who wants to get the best possible service for her money - and why not? In exchange for her dollar, she is entitled to a service that represents our industry as professional and knowledgeable.

What does it take to meet the needs and expectations of the Widow Carter? It takes a team.

So, let’s build a team. Team building is simply getting a group of people together to achieve a singular goal. Start with a few nice folks that trim trees. Then we have to establish a leader, an individual who is willing to be directly accountable to the client and to his fellow teammates; someone who is willing to set in and take charge of day-to-day operations. Realizing that this one person is incapable of performing all duties by himself, we must surround him with support staff (sales, field, administrative, etc.) and with this realization, training becomes necessary. It is critical that this leader is willing to train his subordinates to possibly, one day, replace him. This would be a fine leader.

Next, we need a couple of well-screened hires who claim they want to do a good job. This is our opportunity to begin a training process that offers a benefit beyond mere monetary gain. Training is knowledge. Knowledge is a possession that cannot be taken away. It is this knowledge that will provide future opportunities which would otherwise be non-existent.

Okay. We have a leader, and we have a trained staff. At this point, I really should point out that training is never ending. The human mind is a living organism, and like all living things, it must be fed - fed information. A regular “training diet” is essential.

Now our cast of characters must share an objective. In this scenario, the objective is to provide professional tree care of the highest standard. Which takes us back to Webster’s definition of working together toward that singular goal which, in essence, defines a team.

The reward for the team’s unified effort is the tasty profit which will be enjoyed by the whole team.

In closing, a successful team is a win-win-win enterprise in which the client benefits, the practitioner earns a profit, and the industry is well-represented.

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When Europeans first arrived on this side of the Atlantic, they were appalled by the dense forests, the thick underbrush, and the rich assortment of wild animals that were native to the land. While these things constituted a great natural resource, they also represented a terrible danger to frightened people who up until that point had spent their entire lives in the overcrowded cities of the Old World. The settlers’ fears were not without foundation. Wolves, bears, venomous reptiles, and other terrifying beasts infested the forests of New England and Virginia. Then there were the Native Americans, a people utterly alien to Europeans in appearance, language, and custom.

“One of the first things the settlers did was clear away as much of the forest and shrubbery as possible,” says Lorrie Otto, a founder of the Wild Ones Natural Landscapers, Ltd., a citizens’ group dedicated to the restoration of natural habitat. “The newcomers were scared of what lived in the forests, and wanted to create a treeless buffer around their dwellings to protect themselves. As the white settlers moved west, they carried their fears with them. They cut down forests and grasslands, and built farms in their place. Not only were they alienating themselves from nature, they were destroying whole generations of wildlife. What can live on a shaved landscape?”

According to Otto, the common lawn in today’s suburban environment is a remnant of the our ancestor’s paranoia. While we no longer fear Indian raids or wild animal attacks, we still create treeless zones around our dwellings and urban structures. Today these moats of grass function as status symbols. The average American happily spends hundreds of dollars per year to make sure that his 1/4 acre of zoysia or Kentucky blue remains healthy, weedless and properly manicured. But organizations like the Wild Ones may be evidence that the old-fashioned lawn may be losing its appeal. The group has 2500 members in nearly every state in America. Their mission: to encourage wildlife by cultivating trees, shrubs and other natural features in an urban or suburban setting. The Wild Ones are only one facet of a movement that seeks to bring developed lands back to a state of nature. In the years to come many people will elect to coexist with native wildlife, and will alter their living arrangements to make that accommodation possible. Arborists will find profit-making opportunities if they are ready and knowledgeable when this fad becomes a national trend.
Experts contend that native species of trees and shrubs are far better adapted to a natural landscape project than exotics. The reason, according to Joellen Zeh, staff ecologist at Audubon International in Selkirk, N.Y., is because such species are a product of the local environment, and through the process of evolution, have adjusted themselves to the unique soil and climatic conditions of the area. Backyard fauna will thrive under such conditions, but will be unlikely to settle in the neighborhood if the trees and shrubs don't belong there.

"Planting a tree or shrub outside of its natural habitat can stress the plant, and make it highly vulnerable to disease and insect infestation," Zeh says. "In New York state alone there are about a dozen bio-regions, each of them inhabited by their own native species. An arborist is in the position to tell his customer why a given species won't work in a particular habitat. He can create new markets for himself by becoming familiar with native species. People are becoming more interested in using native plants in their own backyard landscaping projects. A good arborist can help them achieve their goals, and do something for himself at the same time."

There are also maintenance advantages to cultivating native trees and shrubs, the primary one being the fact that native species do not require as much maintenance. According to New Mexico-based writer/photographer, Andy Wasowski, the word "native" refers not to geography but to environment. While they do not acknowledge state lines or national borders, the planet's tree and shrub species have adapted to specific areas and environmental circumstances. Under the right conditions, they live as nature intended, growing without encouragement, and surviving on local rainfall, however infrequent that rainfall may be. Planting for cosmetic reasons negates the point of the exercise, and encourages the establishment of "invasives"—trees and shrubs foreign to the site, but resilient enough to crowd out all competitors.

"Some species are notorious invasives," Wasowski says. "There's the Russian Olive, for example, and the Eu-

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**Tree Care Industry - September 1998**

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will be attracted to fruit-bearing shrubs, while mammals will feast on acorns, seeds, and whatever else they find at the roof of the miniature forest. Each layer will act as an independent ecosystem and interact with the other layers in the naturalized zone.

"Recreate the native forest middle layer," says Tim Andrews, an arborist, and landscape & grounds facilitator at Edgewood College in Madison, Wisc.

The middle layer between the canopy and ground is vitally important to many species of birds and animals. Yet, it is the first one degraded when the forest is developed or managed.

"Even forestry practices, such as timber stand improvement, sacrifice the middle layer for the misconception that it competes with forest trees," notes Andrews. "Migrating birds depend on the middle layer for their survival. Nannyberry, viburnum, blackhaw, arrowwood, and other berry-producing shrubs all grow in this region of the forest. Recreate the middle layer. The birds will love you for it."

Dead trees and stumps should also be made available to the many creatures that are likely to make use of them, providing the arborist is not ignoring or continuing a hazardous condition. Dead trees don't look pretty, but prettiness is a non-issue in nature. What looks nice to you will be totally irrelevant to a king snake, whose idea of beauty is a rotten log under which a fat, flea-infested rodent may be hiding. Many animals will make profitable use of dead trees. Owls, hawks, and other birds of prey will use them as perches as they hunt for squirrels, mice and other rodent pests. Bats will spend their daylight hours snuggled under rotting tree bark. Termites will infest the decomposing wood, and become a tasty snack for other species of insects, as well as woodpeckers, lizards, and terrestrial amphibians.

Keep food on the table all year

A backyard habitat should provide the basic needs of shelter, food and water. With this, however, is a third requirement. For the system to work it should also be set up to accommodate the schedules of birds and certain mammals that migrate early in the year or remain active after everything else in nature has found a hole to crawl in for the winter. This can be done by planting trees and shrubs that fruit or flower out of season. Acorns are an excellent seasonal food item, and when combined with other entrees they can help sustain wildlife all winter long. A backyard habitat consisting of a oaks, a cherry tree or two, and fruit-bearing shrubs such as winterberry, sumac, Juneberry and shadbush will certainly do the trick, and adding a species or two on top of that will make matters better still.

"Migratory birds desperately need food and cover during the course of their travels," explains Timothy Dunne, State Biologist for Natural Resources Conservation Services, (USDA) in Annandale, N.J.
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November 5-7
Baltimore, MD
Baltimore Convention Center

See the center of this magazine for TCI EXPO registration

For registration information call the National Arborist Association
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“Before this country was settled, the migrating birds had an established pattern. They knew where the areas were that met their needs and visited those places every year, literally for millennia. Now it’s much more difficult for the birds to find a place where they can rest, take shelter and maybe grab a bite to eat. When they go to their old haunts now, what do they find? People, a lot of inedible grass and no protection.”

In a suburban setting, Dunne recommends planting trees and shrubs in small clumps. Three or four are usually enough to feed and temporarily house a flock of migrating birds. They can be constructed in a back yard, or in some area of the neighborhood that may be uninhabited or under-used at the time of the project. Some water source should be accessible to the site, but if no natural stream or pond is available, a man-made substitute such as a bird bath will do just fine. Cover is as important to migratory birds as food, and many will eschew a site simply because no cover is available. Planting in thick, dense patterns will create an adequate sanctuary—even in winter. The interwoven limbs of the middle-layer shrubs will discourage predator interest and provide a place for the resting birds to roost. Evergreen trees provide real cover no matter what the season; they also provide shelter against the cold. Inside the tangles of an evergreen tree the temperature may be as much as ten degrees higher then the air outside.

“Don’t do what everybody else does,” comments Lorrie Otto on the art of natural landscaping. “If you recommend only one species of tree, and you get a blight, then your whole population may be wiped out overnight. Do something that adds variety to a neighborhood. Instead of cutting shrubs into the little balls, leave them as they are. This will allow them to flower and fruit, which in turn will provide food for birds, and insects. For millennia, migrating birds had a smorgasbord below them, but now they fly away because the cupboard is bare. Man has chopped down the trees and cut the shrubs back. He’s emptied the cupboard, and left the poor birds with nothing to eat. Trees, and shrubs produce hundreds of fruits and nutlets that we humans don’t even look at, but to a bird those little things may mean the difference between starvation and seeing another day. Try to see the world a little more as nature sees it. Just for a moment, try to think like a hungry bird.”
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TREE CARE INDUSTRY - SEPTEMBER 1998
A Journey
You Don't Want to Take

By E. Leif Graefen

When I opened my eyes my first thought was, "Where am I?"
It was like waking up in a strange bed—only I wasn't in a bed; I was laying on my side in somebody's backyard.
I had only a fraction of a second to contemplate this, however, because I was immediately engulfed by the most incredible pain I've ever felt in my life. Then it all came rushing back.

The work day started like any other. We received our work orders for the day and loaded our equipment on the trucks. The sun was just coming up as we headed out to remove some dead trees from a client's property. It was going to be a hot day, and I was grateful for the gallon water jug on the seat next to me. I knew it would be gone by the time the day was over.

When we arrived at the job site, work was divided up and tasks were assigned to each crew member. I was given the responsibility of removing a dead, "beanpole" hickory near the garage. As I went through my daily gear inspection, my thoughts went back to the article I had read recently in TCI magazine. It had pointed out the danger of using only one rope while climbing a tree with spikes. When you encounter a branch, you would have to detach the rope and reposition it above the limb; at that point you would not be secured to the tree. If something startled you, such as a bee or a squirrel, there would be nothing to protect you from a rather unpleasant journey. Solution? Use two ropes.

As I stepped into my climbing saddle, I double-checked to make sure that I did indeed have two fliplines. I proceeded to strap on the climbing spurs and inspect the tree for signs of decay or weakness. Then I began my ascent. The first branch I encountered was at a height of about 20 feet. One at a time, I detached, repositioned and reattached my two fliplines. My next obstacle came at about 40 feet. This time, I did not move my fliplines one at a time. I looked down on my right side and unsnapped one of the ropes. Apparently, I did this without thinking or paying 100 percent attention. I say apparently, because a second later I looked down on my left and, seeing two ropes attached, I unsnapped one. Unfortunately, I had unsnapped one end of each rope. Then I leaned back.

I knew instantly that something was wrong. As my body fell past the point at which my rope should have caught me, I was swept with a sickening realization. Since my feet were stuck to the tree with spikes, I pivoted upside down and fell headfirst. A scream tore from my throat as I felt my feet jerk loose from the tree. The next thing I knew, I was on the ground feeling like I had been run over by a truck.

I spent that night in intensive care with a concussion, fractured neck, broken wrist and compression injury to the discs in my back. Unbelievably, there were no internal injuries. A week later I was able to go home, and two months after that, I reported back to work—as a salesman.

In the days following the accident, several things became clear to me. First, this is a dangerous business and should never be taken for granted. Even a split second of not paying attention could cost a life or cause a permanent disability. Second, if you use two ropes, make sure they are easy to distinguish from one another. Make them different sizes, colors, etc. Lastly, see to it that everyone on the crew is properly trained to handle an emergency. It's only through the quick action of my team that I am able to write this today.

E. Leif Graefen is district manager for Hendricksen, the Care of Trees in Orland Park, Ill.

Do you have a story for From the Field? TCI will pay $100 for published 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.
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November 5-7

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Welcome to Baltimore and the 9th Annual Tree Care Industry EXPO!
Presented by the National Arborist Association, Inc.
and the International Society of Arboriculture

Thank you to The Care of Trees, Herndon, VA for this year's tree donation.

Why you should attend!
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Registration must be received by October 23 to receive FREE admission to the trade show! A $10 TRADE SHOW ENTRANCE FEE will be charged after October 23. Registration is required to obtain your admission badge.

Take advantage of the educational seminars. SAVE! SAVE! SAVE! Register before the Early Bird deadline of October 2 to receive your discounts. SAVE, SAVE, SAVE...Bring additional co-workers from your company and save on each registration.

Please Note: We encourage you to bring all of your employees to TCI EXPO '98. TCI EXPO is a valuable educational experience. Exhibitors are not permitted to recruit employees on the trade show floor.

Baltimore Convention Center
November 5-7
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Schedule of Events

Thursday, November 5, 1998

7:30am  REGISTRATION OPENS
Complimentary coffee available

8:30 to 9:45am  KEYNOTE ADDRESS:  COMMERCIAL ARBORICULTURE IN THE REARVIEW MIRROR – Don Blair

What better way to kick off EXPO than with noted author, lecturer, and self-confessed arborist Don Blair. In his inimitable style, he will present an entertaining, sometimes humorous, sometimes serious look at the history of arboriculture and arborists. He will tie that history to the future of the industry.

9:57am  TRADE SHOW OPENS

Don’t miss a single booth! Wear your walking shoes, because with over 160 exhibitors, there will be a lot of ground to cover. TCI EXPO is the largest tree care trade show in the nation. If it will make your business more efficient, competitive, productive or profitable, you’ll find it here. Plus, we’ve arranged for plenty of exciting demonstrations ranging from climbing and rigging to cabling and bracing. Check your show program for times and locations. To keep up with the industry, you won’t want to miss a single demo.

12:00 Noon  ARBORBUCKS DRAWING – Demonstration Area

Be sure to fill out your entry form and you could be the winner of ARBORBUCKS currency. ARBORBUCKS can be used as cash at any of the participating vendor booths. Here’s your chance to win the goods and services you need!

2:00pm  ARBORBUCKS DRAWING – Demonstration Area

It’s not too late to enter the drawing. You could be the winner!

4:00pm  TRADE SHOW CLOSES

4:00 to 5:00pm  ADVANCEMENTS IN THE USE OF BIOLOGICALS – Mike Raupp

Raupp is Professor of Entomology and Chairman of the Department of Entomology at the University of Maryland in College Park, helping to develop, implement, and evaluate landscape Integrated Pest Management programs. This presentation will focus on the use of new systemic and microbial insecticides. The proper timing and method of application will be discussed for several key pests, including leaf miners, defoliating caterpillars and beetles, and sucking insects. The relative advantages and disadvantages of these materials, with particular reference to natural enemies, will be discussed.

4:00 to 5:00pm  BUSINESS PLANNING IN 3 EASY STEPS – Phil Nilsson

There is an old adage, “Businesses don’t plan to fail, they fail to plan.” Sound planning is the cornerstone of success in small business, yet many tree company owners do not plan adequately. Nilsson possesses a unique combination of knowledge, first-hand experience, and business expertise that make him uniquely qualified to help small business owners. He will present real-world concepts of planning that will better enable you to land the work, do the work, and control your bottom line.

6:00 to 7:00pm  WELCOME RECEPTION FOR ALL ATTENDEES AND EXHIBITORS
International Ballroom, Omni Inner Harbor Hotel
Complimentary hors d'oeuvres.

Visit with old friends, make new ones, network, and enjoy an evening of fun with fellow tree care professionals.

Friday, November 6, 1998

7:30am  REGISTRATION OPENS
Complimentary coffee available

8:00 to 9:00am  BACTERIAL LEAF SCORCH: SEARCHING FOR CURES – Jo-Ann Bentz/Jim Sherald

A little-known, and to this point incurable, disease is killing off hundreds of oaks and elms at the National Mall in Washington, D.C. Drs. Bentz and Sherald, Research Entomologist and Pathologist, respectively, for the National Park Service, will show how the disease is transmitted, how it can be diagnosed, how it works in the tree and what is being done to find a cure. Arborists will also find this knowledge is relevant to other, more common tree diseases they face.

8:00am  TRADE SHOW OPENS

Plan on an information-packed day of demonstrations, browsing the newest equipment, technologies and services, and exchanging ideas with your peers. There’s no show like TCI EXPO.

9:00am  ADVICE IN THE USE OF BIOLOGICALS – Michael Raupp

Just how do you establish your price? Commercial tree care businesses are really in the business of selling time. Nilsson is a business consultant and author with 15 years experience owning a landscape firm. He is considered an expert in job estimating and financial analysis.

9:30 to 10:30am  ADVANCEMENTS IN THE USE OF BIOLOGICALS – Michael Raupp

(This program is repeated from Thursday. See Thursday’s seminar schedule for program description.)
9:30 to 10:30am CHECKLIST FOR FEDERAL DOT COMPLIANCE – Federal DOT Representative

If your firm is like most tree care companies, it's regulated by DOT. If arboriculture, and not fleet management, is your area of expertise, this speaker can help smooth the wrinkles of complying with DOT, as well as reducing the downtime, hassles, and costs associated with getting to and from the job site.

12:00 noon ARBORBUCKS DRAWING – Demonstration Area

Be sure to fill out your entry form and you could be the winner of ARBORBUCKS currency. ARBORBUCKS can be used as cash at any of the participating vendor booths.

2:00pm ARBORBUCKS DRAWING – Demonstration Area

It's not too late to enter the drawing. You could be the winner!

4:00pm TRADE SHOW CLOSES

4:00 to 5:00pm STRESS: FROM THE BRANCHES TO THE ROOTS AND BACK AGAIN – Phil Wargo

Though it may not be visible, root physiology in greatly affected, directly and indirectly, by above-ground stresses. That altered physiology may predispose the tree to disease or insect attack, or have other profound, long-term effects on overall tree health. Dr. Wargo, Principal Plant Pathologist with the U.S. Forest Service, has spent a distinguished career studying as well as teaching others about the dynamic interaction between roots and the rest of the tree.

4:00 to 5:00pm CHECKLIST FOR FEDERAL OSHA COMPLIANCE – Amelia Reinert

Confused about what your company needs to do to comply with OSHA? Reinert is Deputy Executive Director and Director of Governmental Affairs for the National Arborist Association (NAA). She regularly counsels NAA members on how to avoid problems with OSHA as well as how to deal with problems once they have arisen. Take advantage of the collective expertise and insight derived from hundreds of OSHA visits by attending this session.

5:15 to 6:15pm THE FACTS AND FALLACIES ABOUT STORM-PROOFING TREES – Jim McGraw

Can you treat a tree to withstand a tornado? Of course not! This presentation looks at pruning and other arboricultural practices that can have an effect on tree stability and integrity to give you more ammunition the next time a client asks you to storm-proof trees. Dr. McGraw is an extension tree specialist in North Carolina.

5:15 to 6:15pm EMPLOYEE TRAINING - IS IT WORTH IT? – Robert Ash

The answer is a resounding YES! Ash will acquaint you with the fundamental principles of managing your employee resource that every company owner must know, look at the various goals and objectives of employee training, and show you how to get started. Ash is a professor at Santiago Canyon College in Orange California and the principal of Ash & Associates, an organizational and training consulting firm.

Saturday, November 7, 1998

7:30am REGISTRATION OPENS

Complimentary coffee available

8:00 to 9:00am MANAGING DRIFT: THE LATEST TECHNOLOGY – Dr. Bruce Fraedrich

Working at Bartlett Labs, Fraedrich and his colleagues have undertaken remarkable research to find the causes and cures for pesticide drift. He will review the latest techniques and equipment for treating shade and ornamental trees as well as shrubs.

8:00 to 9:00am EMPLOYEE TRAINING - IS IT WORTH IT? – Robert Ash

(This program is repeated from Friday. See Friday’s seminar schedule for program description.)

9:00am TRADE SHOW OPENS

This is your last day to see and learn about everything you need to keep your business moving. Be sure to take advantage of all TCI EXPO '98 has to offer!

9:00 to 9:30am Coffee Break

9:30 to 10:30am STRESS: FROM THE BRANCHES TO THE ROOTS AND BACK AGAIN – Phil Wargo

(This program is repeated from Friday. See Friday’s seminar schedule for program description.)

9:30 to 10:30am INTERPRETING & USING STANDARDS FOR TREE FERTILIZATION – Tim Johnson

The ANSI A300 Committee is preparing to publish a standard on the controversial subject of tree fertilization. What will this standard contain, and just what impact will it have on your operation? Who better to tell you than Tim Johnson, practicing arborist and Chairman of the ANSI A300 Committee!

11:00am ARBORBUCKS DRAWING – Demonstration Area

It's not to late too enter the drawing. You could be the winner!

1:00pm ARBORBUCKS DRAWING – Demonstration Area

This is your last chance to win! See you in the demo area.

12:30pm ISA Certification Exam Check-in

1:00 to 4:30pm ISA Certification Exam

To sit for the exam, you must call ISA to preregister at 1-217-355-9411. Application and registration fee must be received at ISA 12 days prior to exam date.

3:00pm TCI EXPO ’98 TRADE SHOW CLOSES!
Getting There...

Driving is Easy...

FROM: ALL POINTS WEST - Hagerstown, Frederick
Route 1-70, or Route 40
From either I-70E or Route 40E, enter the Baltimore Beltway (I-695S towards Glen Burnie). Continue on I-695S to I-95 N (Exit 11A) towards New York. Take exit 53 (I-395 Downtown), veer right onto Convoy Street and continue to Charles Street. Make a left onto Charles Street. The Convention Center will be 1/2 a block on the left side of the street.

FROM: ALL POINTS SOUTH - Washington DC, Alexandria, Richmond, VA
Route 295N or I-95N
Take 295N (Baltimore/Washington Parkway) towards Baltimore. 295N becomes Russell Street. Go past Oriole Park at Camden Yards on your right and turn onto Pratt Street. Continue for 4 blocks and the Convention Center will be on the right side of the street.

OR
Follow I-95N towards Baltimore to exit 53 (I-395 Downtown). Veer right onto Convoy Street and continue to Charles Street. Make a left onto Charles Street. The Convention Center will be 1/2 block on the left side of the street.

FROM: ALL POINTS EAST - Eastern Shore, Annapolis
Route 50W, I-97N
Follow Route 50W to I-97N. Follow I-97N to I-695N towards Baltimore, staying in the right lane. Taking exit 7b, 295N (Baltimore/Washington Parkway) towards Baltimore. 295N becomes Russell Street. Go past Oriole Park at Camden Yards on your right and turn right onto Pratt Street. Continue for 4 blocks. The Convention Center will be on the right side of the street.

FROM: ALL POINTS NORTH - New York, New Jersey, Pennsylvania, Delaware
Route I-95S
Follow I-95S to the Fort McHenry Tunnel. Once through the tunnel, take exit 53 (I-395 Downtown). Veer right onto Convoy Street and continue to Charles Street. Make a left onto Charles Street. The Convention Center will be 1/2 a block on the left side of the street.

FROM: ALL POINTS NORTHEAST - York, Harrisburg, PA I-83 (Harrisburg and Jones Falls Expressway)
Take I-83S towards Baltimore, bear right onto I-495W towards Pikesville and then exit back onto I-83S towards Baltimore. Take the Maryland Avenue exit and continue South. Maryland Avenue will turn in Cathedral Street. Follow to Pratt Street and turn left. The Convention Center will be 1 block on the right side of the street.

Flying...

US Airways
US Airways has been selected as the primary airline for TCI EXPO ’98. It is offering special discounted fares to TCI EXPO meeting attendees. To make your reservation, call US Airways Group Reservation Center at 1-800-334-8644 and reference the National Arborist Association’s Gold File # 16610298.

Continental Airlines
Continental Airlines has been selected as the alternate air carrier. Special discounts have been arranged on your air transportation. To take advantage of this special offer, please call Continental MeetingWorks Reservations at 1-800-468-7022 and refer to Reference Number NSG475. If you prefer to use your own Travel Agency, simply ask them to call Continental for the specific pricing offer filed with the above Reference Number and to put the code ZXN6 in the Ticket Designator Box on your ticket. Following these instructions will ensure you receive the best possible price on your ticket.

Airport Transportation...

The BWI Airport Shuttle departs daily from the airport every 30 minutes between 5:45 am to 11:45 pm. The ticket price is $11 one way and $18 round trip. The shuttle departs from the lower level of the airport, and the ticket counter is located between baggage claim areas 3 & 4.

Finding a Hotel Room...

The host hotel for TCI EXPO ’98 is the OMNI INNER HARBOR HOTEL, located at 101 West Fayette Street (3 blocks from the Convention Center). The OMNI INNER HARBOR HOTEL is offering TCI EXPO ’98 attendees a rate of $109 single/double occupancy. Valet parking is available for overnight hotel guests at a daily rate of $14. This includes in and out privileges on a 24-hour basis. Self parking is available on a daily basis at a charge of $9 per day (no in/out privileges). Space is limited, be sure to make your reservation early. This rate will be offered until October 2, 1998. To make your reservation, please call the OMNI INNER HARBOR HOTEL at 1-800-843-6664. Be sure to reference the National Arborist Association/TCI EXPO room block.

Alternative accommodations are available at the Baltimore Hilton and Towers located at 20 West Baltimore Street (3 blocks from the Convention Center). The Baltimore Hilton and Towers will offer TCI EXPO ’98 attendees a rate of $95 single/double occupancy, valet parking is available for overnight hotel guests at a daily rate of $15. This includes in and out privileges on a 24-hour basis. Reservations must be made by October 2, 1998 in order to guarantee this preferred rate. To reserve your room, please call the hotel at 1-888-466-4644 and be sure to reference the National Arborist Association/TCI EXPO room block.

Additional accommodations are available at the Days Inn Inner Harbor located across the street from the Baltimore Convention Center. The address for the Days Inn is 100 Hopkins Place, Baltimore, Maryland. The Days Inn will offer TCI EXPO ’98 attendees a rate of $90 single/double occupancy, parking is available for overnight guests. Reservations must be made by October 3, 1998 in order to guarantee this preferred rate. To reserve your room, please call the hotel direct at 1-410-576-1000 and be sure to reference the National Arborist Association/TCI EXPO room block.

SEMINAR REGISTRATION CANCELLATIONS
All seminar registration cancellations must be received in writing at the National Arborist Association office. Cancellations received on or before October 23, 1998, will receive a full refund less a $25 administrative fee. Fees cannot be refunded after October 23, however you are welcome to send a replacement. No telephone cancellations will be accepted.

REGISTRATION
Early Bird registrations must be received by October 2, 1998. Registrations received after October 2, 1998, not complying with the appropriate fees, will be billed accordingly. A $10 TRADE SHOW ENTRANCE FEE will be charged after October 23. Registration is required to obtain your admission badge. Everyone is required to wear a badge issued by the National Arborist Association to enter the exhibit hall and all seminars. Be sure to pre-register to avoid long lines at the registration area.

EXHIBIT HALL HOURS
Thursday, November 5, 1998
9:57am - 4:00pm
Friday, November 6, 1998
9:00am - 4:00pm
Saturday, November 7, 1998
9:00am - 3:00pm
REGISTRATION FORM

REGISTRATION INFORMATION

Name ____________________________
Title _____________________________
Company __________________________
Address ___________________________
City ___________________ State ______ Zip ______
Phone ______ Fax ____________
Signature __________________ Date ______

Is your company an NAA Member Firm?  ☐ Yes ☐ No

3 EASY WAYS TO REGISTER

Fax your completed form to 603/672-2613.
Our fax line is open 24 hours a day.

Phone 1-800-733-2622,
8:00 am - 5:00 pm Eastern Time.

Mail your completed form with payment to:
NAA
PQ Box 1094
Amherst, NH 03031-1094

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SEMINARS

Check the box beside each seminar you wish
to attend. **Be careful not to pick two seminars at the same time.** Count the number of seminar hours indicated next to the seminar titles. Record this number in the space marked total seminar hours.

### GOLD CARD

If you are attending **5 or more seminars** and register by October 2, BUY GOLD!

To purchase the GOLD CARD, which will give you unlimited access to all educational sessions and the Trade Show, check YES in the box below, enter $175 in the total cost line and you're done!

I wish to buy a Gold Card registration.  ☐ Yes ☐ No

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### DATE SEMINAR TITLE SEMINAR HOURS

**THURSDAY, NOVEMBER 5**

☐ #1 - 8:30 am Commercial Arboriculture in the Rearview Mirror ... 1 Hour
☐ #2 - 4:00 pm Advancements in the Use of Biologicals .......... 1 Hour
☐ #3 - 4:00 pm Business Planning in 3 Easy Steps .......... 1 Hour

**FRIDAY, NOVEMBER 6**

☐ #4 - 8:00 am Bacterial Leaf Scorch: Searching for Cures ..... 0 Hour
☐ #5 - 8:00 am Low Price: When to Say When .................. 1 Hour
☐ #6 - 9:30 am Advancements in the Use of Biologicals ....... 1 Hour
☐ #7 - 9:30 am Checklist for Federal DOT Compliance ........ 1 Hour
☐ #8 - 4:00 pm Stress: from the Branches to the Roots and Back Again ... 1 Hour
☐ #9 - 4:00 pm Checklist for Federal OSHA Compliance .......... 1 Hour
☐ #10 - 5:15 pm The Facts and Fallacies about Storm-proofing Trees ........ 1 Hour
☐ #11 - 5:15 pm Employee Training - Is it Worth It? .......... 1 Hour

**SATURDAY, NOVEMBER 7**

☐ #12 - 8:00 am Managing Drift: the Latest Technology ........ 0 Hour
☐ #13 - 8:00 am Employee Training - Is it Worth It? .......... 1 Hour
☐ #14 - 9:30 am Stress: from the Branches to the Roots and Back Again ... 1 Hour
☐ #15 - 9:30 am Interpreting & Using Standards for Tree Fertilization ... 1 Hour

TOTAL SEMINAR HOURS _______________________________________

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### CALCULATE YOUR COST

**BASIC COSTS:** Multiply your total seminar hours by $48 and enter the amount on the basic cost line.

**DISCOUNTS:** Deduct $3 per seminar if you register prior to the Early Bird Deadline, October 2, 1998. Deduct $6 per seminar if you are registering an additional person from your organization.

**TRADE SHOW ENTRANCE FEE**
☐ by October 23, 1998 - FREE
☐ after October 23, 1998 - $10.00 (FREE with paid seminar)

TOTAL COST: Subtract your discounts from your Basic Cost line.

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Do you wish to receive NAA Membership Info?  ☐ Yes ☐ No
Do you wish to receive a complimentary subscription to Tree Care Industry (TCI) Magazine?  ☐ Yes ☐ No

You must complete all of the information below to receive your subscription:

Business/Industry: (Please check one that applies)  ☐ Tree Service  ☐ Landscape Contractor  ☐ Governmental Entity
☐ Property Mgmt.  ☐ Consulting Firm  ☐ Utility  ☐ School/University  ☐ Other: __________

Purchasing Authority:(please check one that applies)  ☐ Approve  ☐ Recommend

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### PAYMENT PROCESSING

☐ Payment Enclosed  ☐ MasterCard/Visa
AMOUNT $________________

CARD NO __________________ EXP. DATE __________

NAME __________________ (as it appears on your card)

SIGNATURE __________________

See Reverse Side for Special Membership Offer
BACK BY POPULAR DEMAND... ARBORBUCKS!

There will be two drawings for at least $250 in ARBORBUCKS on the Trade Show floor. Drawings will be held on Thursday and Friday at 12:00 NOON and 2:00pm and Saturday at 11:00am and 1:00pm. ARBORBUCKS can be used the same as cash to make purchases from participating vendors at the show. There is no cost to enter the drawing, and the chances of winning are fantastic!

ARBORBUCKS—just one more reason to join us at TCI EXPO '98.

Be sure to look for these ARBORBUCKS participants:
- Aerial Lift, Inc.
- Agapé Designs
- American Arborist Supplies Inc.
- ArborSystems, LLC
- Asplundh Tree Expert Co.
- Bailey's
- Bandit Industries, Inc.
- Bartlett Manufacturing Company
- John Bean Sprayers
- Bone Safety Signs
- Buckingham Mfg. Co., Inc.
- CNA Commercial Insurance
- Creative Automation Solutions
- First Sierra Financial, Inc.
- Green Mountain Outfitters
- Growtech, Inc.
- Growth Products, Ltd.
- The Hartford
- Husqvarna Forest & Garden Co.
- Karl Kuemmerling, Inc.
- National Arborist Association
- National Insurance Programs (NIP)
- Northeastern Arborist Supplies
- Peavey Manufacturing Co.
- Practical Solutions, Inc.
- Rayco Manufacturing, Inc.
- Reading Body Works, Inc.
- SawJammer Co., LLC
- Shelter Tree, Inc./Tree Care Products
- Takagi Tools, Inc.
- Tree Line Supply Co.
- Valley Processors, Inc.
- Vermeer Manufacturing Company
- Weaver Leather, Inc.
- Woodsman
- Zenith Cutter Company

GROW YOUR BUSINESS!