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Looking Ahead

Well, it’s a new year. Perhaps it’s time to look at your business from a fresh perspective, and to stimulate your thinking, we feature separate articles on the changing faces of utility line clearance and residential/commercial tree service. See “Consolidations, Mergers and Buyouts” by Phil Nilsson on page 18 and “Partners for the 21st Century” by Jon Hall on page 8.

I’d like to address the so-called res/comms: As the face of your competition changes, what might it mean to your business?

This might be hard to imagine, because as Nilsson says, there really is plenty of work for everybody right now. In fact, many companies’ stiffest challenge is completing the work to which they’ve committed.

The article observes that big companies, whether they’re retail- or service-oriented, are generally less profitable, but make it up in volume, as their overhead is spread out over a wider sales base.

I know that the old adage in retail sales is that you get what you pay for. Those big retail chains exist because there is a clientele that is willing to give up personal service and a long-term commitment for a lower price. Is the same thing true of the tree care/landscape maintenance industry? In my opinion, if you believe that to be true, it becomes a self-fulfilling prophecy.

First of all, the typical tree care client is probably not of the “cheap is good” philosophy. Customers want a reasonable price and reasonable quality.

Secondly, the big companies I’ve seen don’t subscribe to the notion of, “Lower price—less service.” In fact, they strive for consistency of pricing and service. The trend is toward a greater diversity of services, which is an entirely different animal.

It’s a big world, and you can survive as a small business. Knowing your costs and managing the business aspects of your operation shrewdly becomes absolutely vital in the face of stiff price competition, no matter if the competition is from a conglomerate or a weekend arborist.

Not that it’s necessarily bad, but there is an alternative to merging or being bought out. You needn’t price yourself out of existence, either. Your future is what you make of it.

Peter Gerstenberger,
Director of Safety & Education
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JANUARY
continued on page 6

Features

8 Partnering With Utilities
By Jon Hall

26 Comments Needed on ANSI Draft Standards

42 Trees, Golf Courses & Development
By Felicia Gillham

8 Strategic Alliances Point the Way
Deregulation in utility industry brings opportunities for the companies willing to adapt.

On the Cover

Outlook
By Peter Gerstenberger
Face the future with optimism.

16 Washington in Review
By Peter Gerstenberger
With OSHA, it's one step forward and two steps back.

18 Readers' Forum
By Phil Nilsson
Is green industry next sector for a case of merger mania?

24 Cutting Edge
New products and news in the tree care industry

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JANUARY
continued from page 4

Departments

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By Mark Battersby
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Deregulation is causing utilities to regard line clearance companies in a whole new light

By Jon Hall

ComEd, one of the nation's largest investor-owned electric utilities, is signing open-ended, long-term contracts with its line clearance contractors in an effort to develop more stable work relationships, which ComEd officials believe will save money and benefit both parties.

Whether that's true remains to be seen, but the pot is a big one with the utility shelling out between $40 and $50 million annually to care for the 2.8 million trees in its system. And ComEd is plunging ahead with one of what it describes as "strategic" alliances that just might change the face of the entire line clearance industry. It signed one last year and two more are scheduled for signing this month.

Already working under new terms is Nelson Tree Service of Dayton, Ohio, which handles the utility's two southern regions. Soon to be added to the list are Wright Tree Service Inc. of Des Moines, Iowa and Asplundh Tree Expert
Company from Willow Grove, Penn. All three have worked for ComEd for years.

Officials of the three tree trimming companies are optimistic about the new arrangements, though they seem somewhat uncertain about how it's all going to work. The three companies handle clearance work along ComEd's distribution lines, leaving the transmission lines to another company.

ComEd is a huge company that services the homes, businesses and lifestyles of over eight million people in northern Illinois. ComEd's 11,318-square mile service area includes Chicago and over 400 municipalities, which together account for over 70 percent of Illinois' population.

Through the three contractors, ComEd fields as many as 280 line clearance crews, which trim trees, suppress vegetation, respond to storm emergencies and do planned maintenance on the distribution system. What's different with these arrangements is that ComEd officials believe sharing information, and being more open and trusting with their contractors — and getting the same cooperation in return — can help both do a better job. If they are correct, the new arrangements should lead in the long run to lower costs for the utility and higher profits for the line clearance contractors.

Of course, the ultimate goal is to reduce outages caused by fallen trees.

"After all, if you don't reduce the outages, what's the point," notes John Albrecht, the ComEd contract specialist negotiating the contracts.

But will it work? Well, no one is sure, but both sides seem to think it can. What exactly are strategic alliances?

"Mostly, it's a different way of doing business," explains Paul Appelt, vegetation management superintendent for ComEd. The new agreements will follow a basic philosophy of "splitting the difference," under which money saved by putting their heads together to do a better, more efficient job can be shared. For example, employees of the utility and the line clearance company will work together, bouncing ideas and possible cost efficiencies off of each other. If together they figure out a way to cut the cost of some facet of service from $100,00 to $80,000, they would split the difference. The utility would save $10,000 and the contractor would earn an additional $10,000. In effect, the tree care company would be paid less but would make more money.

"I think the trend is clearly toward them," says Jeff Jones, a vice president and chief financial officer with Nelson, which holds the largest amount of the utility's line clearance business.

Likewise, John Wright, whose Wright Tree Service holds the next largest segment, believes the longer pacts benefit the private contractors because they allow the firms to spread out the costs of doing business over a longer, more stable revenue stream. "I think that if the agreement is to work a much better relationship will develop between the utility and the contractors, because the two entities have to trust each other and have open communications."

Wright, ironically, said that the new contracts aren't really that new; that they resemble what he termed "evergreen contracts," which he recalls were quite common some years ago.

"They were used quite extensively many years ago, say in the 40s, 50s and 60s," according to Wright. "The majority of our contracts were non-expiring; they could be terminated by either
Asplundh holds the smallest amount of ComEd’s line clearance business, it’s looking forward to earning an increased market share under the new arrangements.

“We are lobbying for more,” says Asplundh. “It’s our desire to grow; we’re not happy with our market penetration.” On the other hand, he says, his company’s already garnered more work from ComEd, for which “we are grateful.”

What exactly are these new alliances and how did they come about? ComEd began looking at the way it contracted line clearance work in 1997, according to company officials, in the wake of the deregulation and a need to become more competitive. According to Albrecht, company officials recognized the need to improve customer service, as well as become more efficient.

To illustrate his point of ComEd’s goals in the process, he tells this parable:

There’s an old, blind, childless, poor man to whom an angel appears one day to offer a wish because the man has never complained of his afflictions. The angel tells the man to think about what he might want; the angel promises to return the next day. The man tells the story to

Still Room for the Little Guy?

When Todd Olerud opened New Age Tree Service in Spring Grove, Minn., four years ago, he started with three employees and the idea that he could compete in the highly competitive line clearance business. He had been working for a line clearance company in the area when he decided to strike out on his own.

Almost from the start, New Age took on right-of-way work clearing brush and trees from power lines. “We started with a small contract,” relates Olerud. “I had a good relationship with the line superintendent, so we landed some small jobs with St. Croix Electric.”

The first contracts were billed by the hour. The power company would tell Olerud what equipment was needed to do the job and would ask how much New Age would charge by the hour. “At that time the utilities thought it was better to do things manually,” he notes.

Work was painfully slow. Most of it was manual labor. “All we had was a truck, chipper, a couple of guys and chain saws,” Olerud recalls. “We did a lot of climbing, roping and pulling over trees.”

Though the business grossed $100,000 that year, something had to change. When he looked at his books at the end of the year, he decided he had earned too little return from so much work. Olerud then faced the hurdle most smaller contractors must overcome—how to afford heavier equipment. Even smaller ROW units, such as the Posi-Track from ASV, retail for $40,000 and up.

New Age made the leap, and the financial investment has paid off so far. The company has graduated from hourly, manual work to larger contracts requiring more equipment. He now owns six ASVs, and, as a result, New Age Tree Service has grown rapidly. In just four years, Olerud has gone from three to 28 employees and to grossing well over $1 million annually.

In a sense, New Age is bucking a national trend toward fewer companies landing single-source contracts. “Some of these big companies do dominate the business,” he concedes. “They can come in and charge less. Their return is lower. We’ve done a good job getting the power companies to look at the end result rather than focus only on costs.”

Also, on the smaller jobs “we’ve been cheaper than everybody else,” says Olerud. “Most of the contracts are with local cooperatives. We don’t have on-the-road expenses for crews.”

Despite rapid growth, Olerud is nervous about the future of the utility industry. The rural cooperatives that make up the bulk of his business are consolidating, at least when it comes to contracting. He worries that the work will consolidate too. “We’re trying to find our spot. It’s going to be harder for anyone to start up.

“Consolidated contracts make it more appealing to the larger companies. It’s worthwhile to larger companies when contracts expand in size. Before, the utility needed six or seven guys here and there,” Olerud notes.

After all the utility mergers are completed, sometime this year, where does that leave smaller companies like New Age? Olerud isn’t worried about finding work, even if it isn’t with electric utilities. New Age has landed work recently clearing for companies laying down fiber optic cables. “There’s plenty of work,” he insists. Still, utility work is far from certain.

“Either we’re going to get bigger or we’re going to get smaller,” says Olerud. “It’s all up in the air. It’s a changing market—go big or stay home.”
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his wife, who immediately suggests he wish for sight, so he can see her. How wonderful that would be, he thinks, but the man wants more.

Then, he told his family, who urged a wish for children. Yes, he thought, he’d like that; but he wanted more. His neighbors pushed him to go for wealth with which he could by anything else he wanted. Finally, the old man made his decision and slept the rest of the night.

In the morning, when the angel returned, the man replied that he wanted to see his children eating off golden plates.

The story illustrates ComEd’s goal. “We don’t just want one thing; we want it all,” admits Albrecht. By that he means the utility not only wants to

Every day the utility arborist looks at the above-ground section of a tree and tries to determine how it can best be managed to serve the utility, customer, customer’s neighbors, city, state, micro-environment, macro-environment, and above all, that particular tree. The utility arborist uses his or her education, experience, and finely tuned common sense to make the most non-intrusive, politically correct decision to maintain the highest service reliability possible for the utility.

When placing underground utilities, a fair amount of these pressures can be avoided if the utility arborist’s planning stages are shifted. Instead of using historic vegetation management records to figure out what circuit is due for cycle maintenance, the utility arborist should be involved in all stages of work in the urban forest. An echoing complaint of utility arborists seems to be, “Why did they build the line down the tree side of the road when there are no trees on the other side?” This could be a second chance to preserve trees instead of spending money on pre- and post-construction removals. Certain construction regulations and specifications cannot be changed. but by getting involved early, many pitfalls can be avoided.

Initial Planning Stage

Just like in real estate, it’s location, location, location. The planned underground construction route should be walked with the engineer and/or the draft plan map to find the exact locations of the vaults (underground transformers). Major direction changes can increase the cost by using more conduit and conductor, but moving a vault from one side of the tree to the other could save that tree while making little or no difference in cost. Get educated about different voltage sizes versus conductor size versus conduit size, and ask if cable and telephone are to be included in the project. This will tell you how deep and wide the trench must be and, through joint trench agreements, cable and telephone can sometimes share associated costs. Determine the critical root zone on the most important trees and estimate distances for “molding” or directional boring. The engineer’s fieldwork will be made easier
save money, it wants to improve the value it gets for the money it spends, to become more efficient, improve its customer relations and satisfaction, as well as provide increased value in the contracts for its vendors.

“If I had to put a name on it, it would be constant improvement,” he adds.

To achieve that goal, the utility is focusing on ways to help its contractors increase worker productivity and satisfaction, as well as upgrade their work forces. Albrecht and other company officials pointed out that it doesn’t do any good for a tree care company to hire someone and train him, only to lose him to others who pay or offer more. “It’s not uncommon for a worker to get certification and a commercial driver’s license (CDL), then go get a job somewhere else,” says Albrecht.

To reduce employee turnover, longer term contacts may help contractors offer their employees longer term prospects, perhaps a career ladder, rather than the uncertainty that comes with two- to three-year, low-bid pacts that may not be renewed. Appelt sees no reason why workers can’t have the potential to work on ComEd’s property their entire career.

The biggest difference today, he said, is that the new contracts work to increase cooperation. Under the old system, there was no incentive to prevent utilities and contractors from being at odds.

The tendency, recalls Appelt, was for utilities to try and squeeze the most work for the standard bid price, while the contractor tried to deliver as little as possible. “He was there to meet the terms of the contract. But because we had a structure that promoted that kind of relationship, we didn’t work to drive cost down.”

Appelt points out there was no incentive for the utility to look for ways to save the contractor money since the contractor got paid the same either way. “It wouldn’t have done my company any good,” he says.

Now, it’s different. For example, if Appelt can find a way to reduce the number of spare trucks they need to keep around, then he can adjust the rate charged for spare equipment, which is spread among all equipment cost. “Then, perhaps, we can cut the mobilization costs and readjust the pricing formula to perhaps pay a bit more for what’s in use, while still saving the company money. In the meantime, the contractor has to buy fewer trucks, which saves more money,” he figures.

Both Appelt and Albrecht say the idea is to increase the value the utility gets for each dollar it spends. All of this is done by identifying mutual needs during the negotiation process, then finding ways to address them. “The basic premise is that if

A very high tree density combined with frequent winter windstorms makes the utility arborist's job a challenging position. Peninsula Light Company, a non-profit utility located on the southeast corner of the Olympic Peninsula in Gig Harbor, Wash., has decided that new construction should be underground, and overhead-to-underground conversions will reduce tree work and serve customers by maintaining reliability.

with your map revisions. Homeowners are more comfortable granting easements when the engineer tells them “Our certified arborist has approved the plan to be the least intrusive to the trees.”

Pre-Construction Stage

Whether the job is being done in-house or by a contractor, try to be included in the pre-construction meeting. Everyone wants to do a good job so explain where, why, and how things are done to avoid construction damage to trees. I use green fluorescent paint to make start and stop points for tunneling designations. Writing the number of feet from the tree to stop-trenching on the map helps because the backhoe can make painted asphalt disappear pretty quickly. Bring small examples of torn and decayed roots to stress the importance of hand-digging or hand-sawing stray roots. Show that spare conduit can be used as banding to protect the bark cambium from the boom of the backhoe. If chips are needed to avoid soil compaction, the time to start dumping is before the work zone becomes full of other machinery.

Construction Stage

If a concentrated effort has made in the first two stages, the construction stage should be the easiest part of the project. Your design specifications have been met, the walk-through has been done and, if you have explained yourself well, your intent to make the least impact possible on the trees has been fully understood. Unless it is the first tree-friendly project, don’t be the pesky arborist who’s just in the way, but make sure all of the construction foreman have your pager number and know that you are available.

Peter S. Carris is system forester for Peninsula Light Company in Gig Harbor, Wash.
Another aspect of the contracts transfers more responsibility to the contractor to take initiative at the work site, to get away from the so-called "transactional method" of doing business. By that, ComEd officials explain, they mean that a contractor couldn't do anything until the line clearance company received directions from utility officials.

"They couldn't trim a tree until we told them 'go trim that tree,'" says Albrecht. He hopes that will all change under the new arrangements.

"For example," he relates, "say a tree is identified as requiring removal. But the crew gets on site and discovers it's a low-growing tree that can stay. The crew can make that decision.

"They now have certain latitude to make decisions themselves." Under the old system, if the order was to cut the tree, down it came.

Wright notes that utilities now recognize that high-quality crews making good decisions are of prime importance to them—particularly since tree crews are often the only people connected with a utility who interact with the customer.

"Certainly, we have the most contact with the public," says Wright.

Wright, like the other contractors, emphasizes the importance of the contractor being willing to share financial information regarding the contract with the utility so there "are no hidden costs, no hidden agendas." That, he concedes, isn't the easiest thing to do in the highly competitive line clearance industry. "Yet, these are issues you have to set aside if this is going to be successful," he stresses.

When tree care companies such as Nelson Tree Service enter into these agreements, it helps the utilities, too, says Jones.

"I think the utilities across the United States want to be in the electricity generation and delivery business; they don't want to be in the tree trimming business."

What's clear after talking to the contractors is that the new-style contracts are spreading, though each is a little different. "No two are exactly alike," notes Jones, who claims a majority of his company's work is now carried out under such arrangements.

"Years ago, the idea was sole sources, that is, to buy in volume and get a lower price," explains Jones. "That concept may be applied to widgets, but in the service business, what you end up with is perhaps a lower price but not necessarily a better value."

Finally, the new contracts seem to have encouraged each of the contractors to push for improvement. As Asplundh puts it, "you better be safe, productive and have your quality assurance program on line. If not, you're not going to be working."

Jon Hall is a freelance writer and adjunct lecturer at the University of Michigan.
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95-3002 1985 Ford F700 diesel chassis, manual 5/2, hydraulic brakes, with a Hi-Ranger SFI-52PBRI (28512886), 57 ft. working height behind cab mount, dump body, with one-man end mtd. $24,000.00

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Twelve (12) 1994 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 FO 1060, All have automatic transmissions (either MD3060 or MT653), No-spin rear ends, Air Brakes.

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After an encouraging start last fall, NAA’s dialogue with OSHA on appropriate safety standards for the tree care industry is all but stalled. However, NAA’s work on several initiatives to improve worker safety continues unabated.

The idea of a working partnership was and is more attractive than the prospect of litigation. One of the reasons that tree care industry representatives sought dialogue with OSHA was to persuade them to stop using inappropriate standards to regulate the tree care industry.

Another of the reasons for the NAA and OSHA seeking one another was to develop guidelines and outreach programs for tree felling, struck-by accident prevention, electrocution prevention and fall prevention. Indeed, the NAA is actively developing several documents that address the above-mentioned issues.

The industry’s main contact in OSHA is Paul Cyr, in the Office of General Industry Compliance Assistance. Cyr’s background is in the logging industry. He has taken an active interest in our industry, attending TCI EXPO with two colleagues, and even participating in a day long Rigging workshop in mid-November.

There was to be a working meeting between representatives of OSHA and NAA on Dec. 8, at which the findings and the work produced by both sides was to be shared. Three working days before the meeting, the NAA was informed that OSHA Deputy Assistant Secretary of Labor E.B. Blanton had invited representatives of organized labor to “participate” in the meeting.

The NAA’s representatives to OSHA decided collectively that going forward with the meeting as intended wasn’t in our best interests.

OSHA held the Dec. 8 meeting with only union representatives—two from IBEW and one from AFCSME—in attendance. After the meeting, Cyr recounted that the union people were “impressive” and came with no agenda. They also had no proposals to offer to the process, but promised to help develop statistical data regarding accidents and the extent of their representation in the industry.

For the moment, Cyr has been advised that the decision whether to resume meetings with OSHA will be made by the NAA’s Governmental Affairs Committee, which next meets on Jan. 27.

Three days after OSHA’s meeting with the unions, Cyr telephoned NAA’s legal counsel with three encouraging pieces of information:

1) Cyr participated in a meeting of OSHA Regional Administrators the day before the call, reporting to them that NAA was considering its position, and that he was hopeful that NAA would return to the table;

2) Assistant Secretary of Labor Charles Jeffress has been favorably “chatting up” the efforts with NAA in speeches he is giving nationally;

3) Blanton will be briefed on the NAA situation.

The industry is being proactive. Its negotiations were derailed through OSHA’s invitation of the unions rather than by anything NAA did. Meeting with the unions was not an agreed-upon ground rule. The NAA will proceed in the interests of promoting employee safety within—or without—the umbrella of the OSHA “partnering” process.

Peter Gerstenberger is director of safety & education for the National Arborist Association.
Introducing the 335XPT arborist saw, built for life in the trees. It's light and balanced, and features our exclusive ArborGrip™, a textured handle with thumb and throttle finger supports to give you a stronger grip for better control. Plus, its snag-free shape and built-in rope ring make it a cinch to haul up. Now nobody is more committed to the arborist than Husqvarna. We offer a full line of specially designed safety gear, and are proud to sponsor ArborMaster training programs. To find your nearest Husqvarna Power Retailer, just call 1-800-HUSKY 62. For information about ArborMaster Training, call 800-487-5958, ext. 8-4513.
Now that the dust has settled on the two "big deals" recently announced—the LandCare USA, Inc. mergers, and the TruGreen-Chemlawn acquisitions—perhaps we can see our way clear to understanding them. Even though they represent hundreds of millions of dollars in business, they're just a drop in the bucket compared to the to-
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Big companies make it up in volume

Consolidations and acquisitions are fancy names for companies joining forces. Since there's strength in numbers, insurance costs are lower, administration support is centralized, certain expenses go down. As sales increase, management costs rise and profits usually drop, but overhead is spread out over a wider sales base. Whereas you may be displeased with small margins because you earn a living from your business, big businesses thrive on smaller profits by making it up in volume. They don't need to earn a $100,000 profit on a business when they can earn $50,000 on each of 20 franchised businesses.

Larger firms also enjoy lower costs for purchases, and overhead may even dominate or "buy out" their suppliers. Nevertheless, big business is made up of dominant or "buy out" their suppliers. Nevertheless, big business is made up of small business units, most of which would not have a competitive advantage if they didn't belong to a "family" of companies. Home Depot, McDonalds and WalMart are examples of companies that have a competitive advantage. Low price is the name of the game—even though most folks understand that they get what they pay for. Some are willing to forego personal service and a long-term commitment for a lower price, which is an attitude you may be forced to adopt if you are forced to compete with some of the industry giants.

Can a big company provide low price and quality service? It remains to be seen ... each time, for every service. Unlike a product where the quality is built-in by the manufacturer, not the retailer, services are produced on-site.

The fact that a low price attracts customers is of little doubt, but the proof that a customer receives a high-quality job and a low price is in doubt. In the field, doing the work is easier said than done. Everybody is on an equal footing. How many times have you lost a contract to a low bid, and within a year or so been asked to return? Customers want both low price and reasonable quality.

If you lose a contract to a "big company," keep tabs on their performance because it may only be a matter of time until you're called back. If the customer is willing to switch to the lowest bidder, talk it out. Think about how you can provide him with service equal to his budget. For example, if your customer tells you that another company is willing to take on your $40,000 contract for $30,000, no problem. Stay with it and give them $30,000 worth of your time and material—no more, no less. Your ability to compete on price may come down to your cost of labor, materials and facilities. However, if one of the well-financed industry "giants" is willing to break even or take a loss in order to get established in your market area, there may be little defense.

Competing on low price

Competing on low price is nothing new. Most tree care companies have had to deal with price competition, though usually is the low bidder is a fly-by-night operator without credentials rather than a vertically integrated conglomerate.

The problem is your prices may have to go even lower when confronted with an emerging "consolidated" business. Rumor has it that prices being handed out by some are unusually low. The emerging company does it to gain a foothold and establish name recognition.

In the landscaping industry, contractors are being "booted out" of larger commercial maintenance properties in major markets. For the moment, commercial accounts are being challenged, but it may not be long until you see competition heating up in residential markets as well. Residential is the mainstay for many a small contractor, and represents a huge volume of business nationwide, so eventually residential will become a target.

It'll come down to being able to compete on price. And since payroll is the biggest expense in the landscaping industry, my advice is to start reducing your payroll costs very soon. Landscapers are finding themselves in the "discount business." The direction for surviving seems to be paying a crew leader an attractive rate with crew workers paid as little as possible.

Some companies have already done this and are making the same profits, but they have had to double their sales volume to do it! By broadening their sales base, they have been able to spread their overhead costs. They are not happy about it, but they're still in business.

If you can’t beat them, join them?

If a competitor has a low cost, low price advantage, you’ll have to follow suit, find a specific market niche or perish. Knowing your costs is more important than ever to know where to draw the line. If you are confronted by one of the big companies who wants to gain a foothold in your market, you may be priced out. If you’re working in a major market and most of your accounts are commercial, watch out!
Consolidation is just getting started. As it continues, competition for prime commercial accounts will intensify. Residential may offer a safe haven for now, but if the giants target residential, there's bound to be change.

Imagine the impact of a national company advertising on prime time TV, offering full service—one company, one monthly bill, one source for everything from lawn mowing to applications to tree work, irrigation installation ... everything. One-stop shopping is a tempting attraction to any homeowner because she can put an array of services on one check.

The marketing impact could be huge. Discounts will be offered for purchase of multiple services, and loyal customer credits won't be far behind. Can a small business compete? Customers don't have the time or patience for anything less, and they will probably be convinced to accept landscape and lawn maintenance as a commodity. You may feel sorry for the corner pharmacist or hardware store owner, but you go to OSCO or Home Depot because their prices are low and they are open seven days a week. Can green industry services be far behind this trend?

Consolidation, mergers, buyouts ... not just for big companies

Consolidation is available to any business. Franchising is one way, mergers or buyouts another. The goal is increased sales, reduced costs and elimination of duplication through greater administrative efficiency, a strengthened labor base, increased purchasing power, and more sophisticated marketing.

But imagine for a moment vast numbers of independent landscape or tree care companies all merging under one name—not just a handful, as we have seen, but hundreds. Would such a company emerge as the nation's largest and best organized? Could such a company go public to raise capital for further growth, and allow some payback to original owners? You better believe it. There's a vast amount of wealth wrapped up in the tens of thousands of landscape and tree care businesses now in operation. Those with annual sales of under a million make up the majority of independent contractors.

Imagine a merger of these smaller businesses. Nobody has to stand passively on the sidelines and watch the industry become organized around others. There are many options. To compete with organized business, you have to be like organized business. You might want to consider organizing or joining a family of companies that may be one of the major players still in the race in the years to come.

Phil Nilsson is a consultant, speaker, and author of How to Merge, Sell or Buy Green Industry Companies. The views expressed here are his own. For more information contact Nilsson Associates at (860) 621-6199.

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WPI Oyster Termiflex, Inc. recently announced two new products to the family including a low-cost passive terminal and a super-compact data collection terminal. The new low-cost OT 10 Passive Terminal is rugged and designed for industrial applications without sacrificing quality or reliability. The PT 20B Programmable Terminal is the most compact, portable data collection terminal on the market for on-site applications. This “Year 2000” compliant terminal delivers 20 hours of continuous usage between charges. It’s user-programmable in C, BASIC or assembler using PC-based packages. For more information, call (603) 624-5252.

Improved vineyard/landscaping pruners from Sandvik Saws and Tools Inc. have redesigned cutting heads and handles to make clean cuts easier and prevent repeat stress injuries. New Series P1 and P2 pruners use thinner blades to reduce cutting resistance and a smooth-acting spring to put more power into the cut. They also incorporate redesigned handles to prevent blisters on the palm, fingers and thumb junction. Series P1 pruners have smooth, fixed upper and lower hand grips. Series P2 pruners have a cushioned rotating lower grip that swivels as the tool cuts to eliminate friction and blisters. Models P1-20 and P2-20 accommodate vines and branches up to 80 inches in diameter (20mm). Models P1-22 and P2-22 have a 1-inch (25mm) cutting capacity. For more information, contact Sandvik Saws and Tools at (717) 341-9500.

Shindaiwa Inc. recently introduced its HomePro series of power equipment with two new trimmers; the straight-shaft 22T and the flex-shaft 22F. Both trimmers feature smaller, lighter engines and components, making them easier to handle and meet California Air Resources Board (CARB) Tier 1 and EPA Phase 1 standards for engine emissions. Major features include: air-cooled, two-cycle engine with vertical cylinder, 1-ring piston; Walbro WYL carburetor with primer pump; automatic centrifugal clutch; fully-electronic, transistor-controlled ignition; semi-wet and silenced air cleaner; and forced air cooling. For more information, call (503) 692-3070 or visit the web site at: http://www.Shindaiwa.com

Designed by arborist Paul Taylor, Arborwear pants withstand the daily rigors of our demanding profession. Double-layered panels from knee to mid-thigh provide reinforcement, while the rugged gusset crotch offers comfort and freedom of movement—even 40 feet above ground. Shirts and belt are also available. For more information, call 1-888-578-TREE (8733)
Gandy Company now offers an additional professional model 24-inch x 48-inch tow-type lawn roller. The roller features a heavy 11-gauge hot-roll steel drum with rolled edges, full-length 1-1/2-inch axle through center, greaseable bearings, two 2-inch fill openings with expansion plugs secured by chains to the solid axle, a spring-loaded scraper, and wrap-around towing for added strength. Empty weight is approximately 244 pounds; working weight, water filled, is approximately 1005 pounds. Shipping weight is approximately 404 pounds. For more information, call (800) 443-2476.

Ice Grips Extremes are ice sandals developed by Jordan Davis High Traction Footwear to prevent slip and fall accidents to workers exposed to wintery conditions. They represent a specialized version of Jordan David's popular Ice Grips sandals. Extremes project 18 helix threads from the sole for auger-like penetration in the worst packed snow and sheet ice; regular Ice Grips employ screw heads protruding from the sole. Strapping easily over any footwear including heavy, thick insulated work boots, they are offered in five sizes ranging from M to XXXL, fitting over boot sizes up to 16 or larger. The different sizes are color-coded for fast recognition. For more information, call (888)-NOSLIPS (667-5477).

Tanaka Power Equipment has added a new product group for tree care professionals. The TPS-2510 Pole Saw is 90 inches in length, which allows an operator to easily reach branches up to 14 feet tall. In addition, it features a 10-inch Oregon bar and chain combination with a self-contained oil reservoir and automatic oiler. For comfort, it has a heavy-duty anti-vibration system and includes the foam padded "D"-style handle found on most Tanaka professional grass trimmers. Powered by a 1.3 hp engine that weighs just 11.4 pounds, it's backed by Tanaka's 1/2/5 warranty coverage which provides one-year coverage for professionals and five years on the electronic ignition module. For more information, contact Mark Woodling at (253) 395-3900.

Corona Clipper recently introduced a new line of bypass loppers. Made in America, these new loppers are available in two styles: the FL 7500 series with 2-1/4-inch diameter cutting capacity, and the FL 7400 Series with 1-1/2-inch diameter cutting capacity. Designed to provide superior performance while cutting mature limbs, they feature handles of unbreakable "Coronaglas" with StrengthWrap, an exclusive design. The handles are carbon-fibre reinforced, circumferentially-wound pultruded fiberglass, which makes them more resilient than wood. This construction provides extra strength and thickness on the outside where the handle receives the most pressure, yet is thinner on the inside to reduce unnecessary weight. The new loppers have a narrow profile head designed to slip into dense, tangled growth. Plus, they feature the same drop-forged, heat-treated, steel-allow blades and forged slant-ground hook as the Corona's line. For more information, contact Corona at (909) 737-6515 or visit their website at www.coronaclipper.com.
Important ANSI A300 Announcement

There are a number of ANSI A300 works in various stages of development:

- **ANSI A300 (Part 2)-1998 Fertilization** has been approved for publication by ANSI and will be available in the near future.
- **ANSI A300 (Part 3)-DRAFT Tree Support Systems - Cabling, Bracing, and Guying** has been granted a public comment period by ANSI. The draft for this important standard is published in its entirety (without annexes and tables) beginning on page 26.
- **ANSI A300 (Part 1)-1995 Tree Pruning** is due for review. The original A300 standard addresses tree pruning. ANSI has granted this standard a public comment period. Again, this your chance to provide feedback! You can get a head start on this one, since the original standard, ANSI A300-1995, is your draft copy. Take a moment to review it and start preparing your comments.
- For instructions on submitting your comments and details on comment periods, turn to page 26.

Kincaid Honored

Doyle Kincaid, a privileged member of the National Arborist Association, was recently honored by the governor of Wyoming for his contributions to community forestry and the professional advancement of the tree care industry in Wyoming.

Kincaid was honored at Wyoming’s 110th Arbor Day celebration in Cheyenne for his achievements over the past 50 years. For decades he has traveled throughout Wyoming and Colorado to promote proper tree care practices among arborists.

Call Backs

The following companies were incorrectly listed as members of the National Arborist Association in our December Buyer’s Guide: TRIMS Software International, Inc., and J.L. Matthews Company, Inc.
1999 is upon us and it's time to inspect all of your arborist climbing equipment. Take special precaution to inspect your climbing lines—they do have a life span! Review ANSI standards and if your line doesn't measure up...

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**"Go Ahead—Ask Big Al"**

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

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Dear Al:

I've been climbing trees for many years, and my faithful rope (which I've had for probably three years) has never failed me. Other than the fact I have had to do some minor splicing work to effect small repairs on the rope, it has served me well and it doesn't show any signs of aging. My wife tells me if I keep using the same rope, it will eventually break and I will leave her a widow. She is even talking about leaving me for another tree man. When I bought my rope, the salesman told me it had a tensile strength of 6,000 pounds. I only weigh in at a petite 225. I have only used it for climbing and for lowering a small limb or two (occasionally). There is no way I am near that 6,000-pound deal. Can you set my wife straight and tell her that what I am doing is okay?

*Threatened Tree Dude*

Dear Al:

I am pretty new in the tree industry and I am not familiar with the lingo. Yesterday, I was roping off the top of a tree with the tail end of my climbing line when, right before I made the cut, I heard someone yell out something about "dynamic loading!" What is dynamic loading and why did my rope snap like an old rubber band?

*Stranded in a Tree*

Dear Stranded:

You are now experienced to the excitement of dynamic loading. "Whenever a load is picked up, stopped, moved or swung, there is an increased force due to 'dynamic loading'. The more rapidly or suddenly such actions occur, the greater this increase will be." What this means is that you have placed a tremendous amount of force on a rope that was only designed for certain application. "Climbing lines, lanyards or prusik loops shall not be used to lower limbs or other parts of trees." (ANSI Z133-1994, 3.2.12). Again, the standard is clear: your rope was not designed for both lowering limbs AND climbing. Especially not at the same time. When placed in this application, the frightening results are that the value of your rope is about equal to an old rubber band.

**Big Al Fontaine**
Your Comments Needed

ANSI A300 is on the move! ANSI A300 gives you the proper language and acceptable practices for writing work specifications! Using ANSI A300 ensures that your company’s salesperson, your client, and your tree care crew are all on the page before a job begins. There are a number of ANSI A300 Parts in various stages of development:

ANSI A300 (Part 2)-1998 Fertilization has been approved for publication by ANSI and will be available in the near future.

The following ANSI A300 Parts have been granted a public comment period from ANSI. Take this opportunity to review the standards that have been created by arborists for arborists!

ANSI A300 (Part 3)-DRAFT 07 Tree Support Systems a. Cabling, Bracing, and Guying has a public comment period of January 15 to March 16, 1999. This important draft has been included in this issue of TCI for your convenience. Take a moment to read it and submit comments.

ANSI A300 (Part 1)-1995 Tree Pruning is due for a revision. The public comment period for the revision is January 1 to March 2, 1999. Again, this your chance to provide your input! Very minor organizational changes have been made to the original A300-1995 so you can use it as your review copy. If you require a review copy, contact Bob Rouse at the NAA.

How to submit a comment

Comments must be submitted in written form and posted through the mail. Phone, fax, and e-mail comments will not be accepted. Comments should outline your differences with a specific line and/or diagram, evidence to support your opinion, and an alternate wording and/or diagram.

Mail comments to: NAA. ATTN: Bob Rouse, PO Box 1094, Amherst, NH 03031-1094

For Tree Care Operations -
Tree, Shrub, and Other Woody Plant Maintenance
Standard Practices

(Tree Support Systems
a. Cabling, Bracing, and Guying)

Draft 07

Publication of this draft standard for trial use and comment has been approved by the National Arborist Association, Inc. Distribution of this draft standard for comment shall not continue beyond 2 months from the date of publication (deadline of March 16, 1999). It is expected that following this 2 month period, this draft standard, revised as necessary, will be submitted to the American National Standards Institute for approval as an American National Standard.

30 Scope, purpose, and application

30.1 Scope

This document presents performance standards for the care and maintenance of trees, shrubs, and other woody plants.

30.2 Purpose

It is intended as a guide for federal, state, municipal, and private authorities including property owners, property managers, and utilities in the drafting of their maintenance specifications and should be adopted by them in whole or in part.

30.3 Application

This standard is intended to apply to any person or entity engaged in the business, trade, or performance of repairing, maintaining, or preserving trees.

30.4 Implementation

Specifications for tree work should be written and administered by an arborist.

31 Normative references

The following standards contain provisions which, through reference in the text, constitute provisions of this American National Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this American National Standard are encouraged to investigate the possibility of applying the most recent edition of the standards indicated below.

ANSI Z60.1-1990, Nursery stock

ANSI Z133.1-1994, Tree care operations - Pruning, trimming, repairing, maintaining, and removing trees, and cutting brush - Safety requirements

29 CFR 1910, General industry 9)

29 CFR 1910.268, Telecommunications 1)

29 CFR 1910.269, Electric power generation, transmission, and distribution 9)

29 CFR 1910.331 - 335, Electrical safety-related work practices 9)
32 Safety

32.1 Tree maintenance shall only be performed by qualified tree workers, who through related training, or on-the-job experience, or both, are familiar with the practices and hazards of arboriculture, and the equipment used in such operations.

32.2 This standard shall not take precedence over arboricultural safe work practices.

32.3 Operations shall comply with applicable Occupational Safety and Health Administration (OSHA) standards, ANSI Z133.1, as well as state and local regulations.

33 Definitions

33.1 amon-eye nut: Drop-forged eye nut, used to fashion through-hardware anchor(s).

33.2 anchor: Hardware to which the cable termination is affixed in a cabling or guy installation.

33.3 arborist: A professional who possesses the technical competence through experience and related training to provide for or supervise the management of tree and other woody plants in the residential, commercial, and public landscape.

33.4 bracing: The installation of steel rods in limbs, leaders, or trunks to provide supplemental support.

33.5 cable: A wire rope.

33.6 cabling: The installation of steel cables between limbs, leaders, or trunks to provide supplemental support.

33.7 compartmentalization: The act of isolating an invading body by blocking its growth, also called “wallowing-off”.

33.8 compression spring: A spring designed to compress under load.

33.9 dead-end brace: A brace that uses a lag-thread rod threaded directly into the tree, but not through the side opposite the installation.

33.10 dead-end grip: Hardware used to form a termination in the end of 1 X 7, left hand lay cable.

33.11 dead-end hardware: Bracing rod or anchor that is threaded directly into the tree but not through the side opposite the installation. Dead-end hardware includes but is not limited to: lag hooks, lag eyes, and lag-thread screw rod.

33.12 eyebolt: Anchoring device consisting of a drop-forged closed eye manufactured on the end of a machine-thread steel rod.

33.13 eye splice: A closed-eye termination formed into common grade cable by bending it back on itself and winding each strand around the cable a minimum of two complete turns.

33.14 grip: A cammed device used with a cable puller to tension a cable during installation.

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TREE CARE INDUSTRY - JANUARY 1999
33.15 guying: Supplemental supports installed to stabilize trees with weak, damaged, or insufficient root systems.

33.16 lag eye: Anchoring device consisting of a drop-forged closed eye manufactured on the end of wood-screw-thread steel rod.

33.17 lag hook (J-hook): Anchoring device consisting of a wood-screw-thread steel rod bent into a J-shaped hook at the working end.

33.18 lag-thread screw rod: A steel rod with wood-screw thread, used in both dead-end and through-bolt installations.

33.19 peen: The act of bending, rounding, or flattening a metal surface for the purpose of securing a nut to a bolt or rod.

33.20 shall: As used in this standard, denotes a mandatory requirement.

33.21 shank: The land (inside the thread) diameter of a screw rod, bolt, or other threaded hardware as delineated by the diameter inside the threaded portion.

33.22 should: As used in this standard, denotes an advisory recommendation.

33.23 strand: Any wire that is twisted together with other wires to form a length of cable.

33.24 swage: Hardware used to form a termination in the end of wire rope.

33.25 taut: The absence of visible slack, yet not so tight as to cause an unnatural bend in the limb, leader, or trunk being supported.

33.26 termination: The end of the cable affixed to the anchoring device in a cabling or guying installation.

33.27 thimble: An oblong galvanized or stainless steel fitting with flared margins and an open-ended base.

33.28 threaded-steel rod: A coarse machine threaded rod used for bracing.

33.29 through-hardware: Anchors or rods that pass completely through the limb, leader, or trunk, secured with nuts and heavy-duty washers.

33.30 turnbuckle: A device for adjusting tension.

33.31 wire rope clamp: A clamp consisting of a "U" bolt, bracing plate, and fastening nuts.

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TREE CARE INDUSTRY - JANUARY 1999
34 Tree support systems

34.1 Purpose

The purpose of this clause is to provide standards for writing specifications for tree support systems.

34.2 Tree support system practices

34.2.1 Reasons for tree support systems

Support systems should be used to provide supplemental support to leaders, individual limbs, and/or the whole plant. Objectives for support systems shall be clearly defined prior to installation.

35 Tree Inspection

35.1 Before beginning work, and while work is performed, a qualified person shall visually inspect each tree.

35.2 Structural integrity and potential changes in tree dynamics shall be considered prior to installing a tree support system.

35.3 If a condition is observed that requires additional attention, this condition shall be reported to an immediate supervisor, the owner, or the person responsible for authorizing the work.

36 Tools and equipment

36.1 Climbing spurs should not be used when climbing trees to install support systems.

36.2 Equipment and work practices that damage bark, cambium, live palm tissue, or any combination of these, should be avoided.

36.3 Grips used to tension the cable shall be designed for use with the type of cable being installed.

37 General

37.1 All necessary pruning should be performed prior to installing a tree support system.

37.2 Prior to the time of installation, the owner or owner's agent should be notified of the need for periodic inspection. Periodic inspections shall be the responsibility of the tree owner and should include: position; system condition; cable tension; and the tree's structural integrity.

37.3 Anchors and rods should not be installed into decayed areas where sound wood is less than 20% of the trunk or branch diameter.

Figure 37.3 a & b.

a. Equation for percentage of sound wood for through-bolt applications.

\[(a + c) \div D \times 100 = \% \text{ of sound wood for through-bolt applications.}\]

Symbol Key for both equations:

\[\begin{align*}
\text{a} &= \text{sound wood depth, working side.} \\
\text{b} &= \text{decayed and/or absent wood diameter.} \\
\text{c} &= \text{sound wood depth, opposite side.} \\
\text{D} &= \text{total trunk/branch diameter, bark diameter not included.}
\end{align*}\]

b. Equation for percentage of sound wood for dead-end applications.

\[(a \div D) \times 100 = \% \text{ of sound wood for dead-end applications.}\]
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55' w.h. LR50 Asplundh
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center, mounted to a 1990
International, DT466
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37.4 Cables or Guys installed in trees
with lightning protection systems shall be
properly grounded to the lightning pro-
tection system (see ANSI A300 Part 4-
Lightning Protection).

37.5 Support Systems shall be installed
in compliance with minimum distance
Table 2 in ANSI Z133.1 for overhead, en-
ergized conductors.

38 Installation practices

38.1 Holes should not be drilled closer to-
together than the diameter of the branch or trunk
being drilled.

38.2 Longitudinal alignment of holes should
be avoided.

Figures 38.1 / 38.2
Correct brace
positioning

38.3 Anchor(s) shall be installed in direct
alignment with the cable and termination hard-
ware, and should not be subjected to side
loading. Only one termination shall be at-
tached to an anchor.

Figure 38.3
Correct cable
and hardware
alignment

38.4 Lag-thread hardware shall only be in-
stalled in sound wood. The hole for the
lag-thread hardware shall be 1/16" to 1/8"
smaller than the diameter of the shank.

38.5 Holes for through-hardware should be
drilled 1/16" to 1/8" (1-3mm) greater than the
diameter of the hardware being installed.

38.6 Lag hooks shall not be used if it is
not possible to seat the full length of the
threaded shank.

38.7 Lag hooks shall be installed to prevent
the termination from coming loose. Bark
should not be damaged during installation.

38.8 When nuts are used to fasten through-
hardware, heavy-duty round washers shall
be installed between the nut and the wood.
On drop forged eyebolts and similar fittings,
washers shall only be installed on the end
outside the eye.

Figure 38.9

38.9 Heavy-duty round washers shall be
used and shall not be countersunk into the
sapwood.

38.10 Fasteners on threaded hardware, such
as nuts, amon eyes, turnbuckles, shall be
secured by peening the through-rod end,
double nuts, or safety wires, as appropriate.

38.11 Terminations shall be the size and type
for the cable to be installed.

38.12 Terminations shall incorporate
thimbles.

38.13 All hardware within a system shall
meet or exceed the minimum strength tol-
erance required to achieve the objective
(see Annex A).

39 Cabling

39.1 Cabling objectives

Prior to installing cabling, the objective shall
be clearly defined.

39.2 Cabling installation

39.2.1 Cables should be taut follow-
ing installation.

39.2.2 Anchor(s) should be installed at a
point at least two-thirds (2/3) of the length
of the limb or leader to be supported, mea-
ured from the trunk or crotch.

39.2.3 The correct angle of cable installa-
tion is perpendicular to an imaginary line
bisecting the angle between the tree parts
being cabled.
The Disc’s 45° angle feed enhances chipping power of the Model 280XP, while The Model 1890’s drum has less of a dead spot. Both units have the proven, efficient Bandit two wheel hydraulic feed system and large chipper openings. Each produces uniform, dimensional chips and virtually eliminates the need to trim. Whether you need a disc or whether you need a drum Bandit has the machine that will take the cost and work out of disposing of tree removals and waste.

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41 Guying established trees

41.1 Guying objectives
Prior to installing guys, the objective shall be clearly defined.

41.2 Reasons for guying
Guys should be installed to stabilize trees with weak, damaged, or insufficient roots systems.

41.3 Guying installation
41.3.1 Hardware shall be installed so that it is in alignment with the angle of pull from the guy.
41.3.2 Permanent guys shall be attached to the tree with dead-end fittings or through-hardware.

41.4 Tree-to-ground guying
41.4.1 Guys shall be secured to a ground anchor sufficient to achieve the objective.
41.4.2 Guys should be attached to the tree at or above a point not less than one-half the height of the tree.
41.4.3 Ground anchors should be placed no closer to the trunk than two-thirds the distance from the ground to the height of the lowest point of attachment in the tree.

41.5 Tree-to-tree guying
41.5.1 Anchor tree(s) shall be inspected for structural integrity.
41.5.2 Anchor tree(s) shall have the ability to meet the objective.
41.5.3 Dead-end fittings or through-hardware shall be used to anchor the guy(s) to the support tree(s).
41.5.4 Guys should be attached to the tree to be supported at or above a point that is one-half the height of the tree.
41.5.5 Guys should be attached to the anchoring tree at a height of not less than 10 feet (3 m) above the ground.

39.2.4 If existing cables are to be replaced, they shall not be cut until the new cable(s) is (are) installed.

Figure 39.2 Correct cable installation

40 Bracing

40.1 Bracing objectives
Prior to installing bracing, the objective shall be clearly defined.

40.2 Reasons for bracing
Bracing systems should be used to provide supplemental support, reinforce, or connect weak tree parts, such as: weak crotches; splits; cracks; cavities; and rubbing limbs.

40.3 When bracing a crotch, a cabling system should be used to provide supplemental support for the limbs forming the crotch being braced.

40.4 Bracing shall be installed in either a through-bolt or dead-end configuration.

40.5 A minimum of two braces should be used to support weak crotches greater than eight inches (20 cm) in diameter (see Annex A).

40.6 Through-bolt bracing
40.6.1 Through-bolt braces shall be used when bracing through decayed area/wood or in trees that are characteristically poor compartmentalizers or are weak-wooded.

40.7 Dead-end bracing
40.7.1 Dead-end bracing shall be performed with lag-thread screw rod.

40.7.2 When bracing a split, the hole shall be drilled completely through the smaller portion and halfway into the larger portion.

40.7.3 The exposed end of the lag thread screw rod shall be inside the bark.

Figure 40.7 Bracing a split

Smaller portion Larger portion

Figures 33.1, 33.8, 33.12, 33.16, 33.17, 33.18, 33.27, and 33.9 are illustrations adapted and formatted, with permission, from Arborist Equipment: A Guide to the Tools and Equipment of Tree Maintenance and Removal. International Society of Arboriculture Publishing, Champaign, IL.
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CI EXPO '98 was a resounding success. More than 3,000 professional arborists from around the world attended the show in Baltimore, Md., which is 20 percent more than ever before!

From the opening note, struck by the Alexandria Royal Fyfes, Drums and Trumpets, to the closing bell, the show floor was a hubbub of buying, selling, information gathering and chance reunions.

One hundred sixty-eight exhibitors gathered to create the largest arborist trade show under one roof. As always, traffic in the central demonstration area was heavy as demonstrators Mark Chisholm, Don Blair, Ken Johnson and Robert Phillips illustrated the latest climbing and rigging techniques.

The area filled to capacity twice each day, at noon and 2 p.m., as lucky Arborbucks winners were called forward to collect their $250 certificates good for show purchases at participating booths.

According to surveys conducted at the show, exhibitors and attendees exchanged more than eight million dollars in just three days. That number does not include sales tallies from exhibitors who didn’t answer the survey, which means the actual total was significantly higher.

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National seminars provided the most comprehensive and well-attended educational programming ever. From OSHA and DOT compliance sessions to seminars on managing pesticide drift or reducing stress, lecture halls were packed. Some presenters offered so much valuable information they found people attending the repeat sessions to hear them again. Others proved so popular the halls became “sitting room only.”

Planning for TCI EXPO ’99, to be held in Indianapolis on Nov. 4-6, is already underway. The dramatic increases in attendance and exhibitor interest has created a unique challenge for this year’s show—exhibit space at the Indianapolis Convention Center was sold out for 1999 before EXPO ’98 in Baltimore was over! A lengthy standby list of exhibitors awaits word on the possibility of expanding the show floor.

Suggestions to improve TCI EXPO ’99 were received from attendees and exhibitors. They ranged from the practical ... “better sound system on show floor” to the urgent ... “coffee at the seminars!” The NAA staff is working on the details to produce an even better trade show and seminar package this year. For suggestions or advanced registration information, please call 800-733-2622. See you in Indianapolis!
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Financing the Urban Forest National Conference  
Lied Conference Center  
Nebraska City, NE  
Contact: 402-474-5655

January 20 - 23, 1999  
ALCA Interior Landscape Conference  
Ft. Lauderdale, FL  
Contact: 800-395-2522

January 22-24, 1999  
Virginia Flower & Garden Show  
Virginia Beach Pavilion  
Virginia Beach, VA  
Contact: 757-853-0057

January 26-31, 1999  
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Cancun, Mexico  
Contact: Carol Crossland, 800-733-2622

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Think Trees New Mexico Annual Conference  
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Green Industry Trade Show & Conference

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Large companies offer a number of non-monetary fringe benefits such as pension plans, health and life insurance, sick-leave pay, credit unions, and health and safety programs. When push comes to shove, in fact, figures circulated by the U.S. Chamber of Commerce show that wages account for only two-thirds of a worker's earnings; the other third is in the form of fringe benefits.

In fact, according to the U.S. Department of Labor, there are more than 5 million firms with fewer than 100 workers, but only slightly more than one million of those firms offer pension plans to their employees.

One way in which many tree care companies are competing with the fringe benefits offered by larger employers is by sharing the wealth. Sharing the wealth—or the profits—of a tree care or landscape maintenance business can take many forms.

Sharing can mean a simple bonus to all employees. Or, far more rewarding, that sharing can take the form of a formal plan. A formal plan to share the profits of the tree care business will further increase the value of that generosity through tax breaks for both the recipient and the employer.

**Basic Bonuses**

Sharing the wealth of the business in the form of a bonus is, of course, a path followed by some arborists. A bonus is tax deductible for services performed. That bonus is, however, taxable income to the recipient, subject to withholding.

Establishing a formal plan, in whatever form chosen, can guarantee a tax deduction for the tree care business while also increasing the value of those shared profits. This is accomplished because a formal or “qualified” plan eliminates the recipient's tax bill on any amounts "shared" and even, in some instances, generates further tax benefits for both parties involved.

**Sharing wealth with a retirement plan**

An employer who wants to provide retirement benefits—share the wealth—with employees will customarily establish a formal pension, profit-sharing or stock bonus plan that qualifies for preferential tax treatment. This includes a tax exemption for the fund that is established to provide benefits, deductions by the employer for contributions made to the fund, tax deferred income for the employee for his or her contribution and earnings from the plan. In some instances, those tax benefits can mean favorable tax treatment when the plan’s benefits are paid to the participant.

**Sharing wealth with a profit-sharing plan**

An employee benefit plan that entitles employees to a share in the profits of a tree care business is common even among smaller employers. When the tree care business does well, the employee gets a bonus; when the business loses money, employees receive only their regularly established pay.

Since employer contributions to a profit-sharing plan are ordinarily based on profits, the owner is not required to contribute any particular percentage of profits. Of course, under the rules, contributions must be substantial and reoccurring.

Remember, however, in order to qualify for the tax benefits, a profit-sharing plan must have a definitive written formula for allocating profits among the individual accounts that are maintained for the participants and be classified as a defined contribution plan.

**Stock bonus plans and ESOPs**

A stock bonus plan is a defined contribution plan that provides benefits similar to those of a profit-sharing plan and is generally subject to the same rules. Certain stock bonus plans (or combination stock bonus and money purchase pension plans)—so-called “employee stock ownership plans (ESOPs)—may enable an incorporated tree care business to qualify for additional tax advantages.

An ESOP is a program that shares the wealth by encouraging employees to purchase stock in the incorporated tree care operation. Employees may thus participate in the management of the operation.

Quite simply, an ESOP is formed, it borrows money which it uses to purchase stock in the incorporated tree care business. The plan uses future contributions by the employer to repay the borrowed money along with interest charges. Each employee owns a share of the ESOP.

The arborist/employer gets an immediate infusion of cash from the sale of its stock. Employees get share of management and eventually, when ESOP loans are repaid, shares of stock in the tree care business.

**Simplified employee pension plans**

A simplified employee pension (SEP) is a written plan that allows the tree care business to make contributions toward both employees’ and the owner’s retirement. Under a SEP, the business shares the wealth by making contributions to an individual retirement arrangement (called a SEP-IRA), which is owned by the owner or one of the employees. The contributions to each employee’s SEP-IRA cannot exceed the smaller of 15 percent of the employee’s compensation or $30,000. The same limit applies to the owner’s SEP-IRA.

Contributions to a SEP-IRA are deductible and generally are not taxable to the plan participants. However, the most that the business can deduct for employer contributions is 15 percent of the compensation paid to them during the year.
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Simple retirement plans

Congress has also authorized the establishment of so-called “SIMPLE” retirement plans. A SIMPLE plan is a written arrangement that provides the tree care business and its employees with a simplified way to share the wealth by making contributions to provide retirement income.

Under a SIMPLE plan, employees may choose whether to make salary reduction contributions to the SIMPLE plan rather than receiving those amounts as part of their regular compensation. In addition, the business will contribute matching or non-elective contributions (share the wealth) on behalf of eligible employees. A SIMPLE plan may take the form of an individual retirement account (IRA) established for each participant, in which case it is exempt like any other IRA, but is not subject to the nondiscrimination and qualification rules that generally apply to other “qualified” plans. Alternatively, it may take the form of a 401(k) plan within a qualified plan.

Basic 401(k) plans

The often discussed 401(k) plan is nothing more than a plan that allows an employee to contribute pretax earnings to a company pool, which is invested in stocks, bonds or money market instruments. Also known as a salary-reduction plan, contributions to a 401(k) plan, as well as earnings on them, are only taxed when withdrawn.

Under a 401(k) plan, employer contributions to the plan will not be included in the income of a participant because the employee has the option of taking the contribution in cash or having it paid to the plan (an “elective contribution”) or because the contribution coincides with a salary reduction arrangement. This type of plan is sometimes referred to as “cash or deferred arrangements.”

A 401(k) plan must generally be part of a profit-sharing or stock-bonus plan that, in addition to meeting the general requirements of a qualified plan, must meet a number of special requirements.

Simple 401(k) plans

As already mentioned, after 1996 certain small employers may maintain SIMPLE plans. One variety of SIMPLE plan takes the form of an IRA established for each participating employee. For a plan to qualify as a SIMPLE 401(k), the following requirements must be met:

Elective contributions. Each employee eligible to participate in the qualified plan must have the right to make an annual elective contribution expressed as a percentage of compensation and not exceeding $6,000. Matching contributions made for an employee, or a self-employed individual, are not treated as elective contributions and are, therefore, not subject to the annual limit on elective contributions.

Matching contributions. Unless the employer exercises the “non-elective contribution” option it must match the annual elective contribution of the employee in an amount not exceeding three percent of the employee’s compensation. As in the case of a SIMPLE IRA, an employer may elect to provide matching contributions of less than 3 percent (never less than one percent). This reduction in rate is not possible in the case of a SIMPLE 401(k).

Vesting. All contributions must be fully vested when made and the plan may impose no restrictions on withdrawals.

Sharing the wealth

It is not pure generosity that prompts so many tree care business owners to share the wealth with their employees. Many owners realize the importance of attracting, retaining and motivating employees. Sharing the wealth or the profits from the tree care operation is an excellent way to accomplish these goals.

Going one step further and creating a formal plan to share the wealth in many cases makes that shared wealth tax-free to the recipient. With a formal plan, be it profit-sharing, a share of the business or a retirement plan, the arborist locks in a tax deduction for all funds paid to the plan and reduces tax bills of all participants—often including the tree care business owner. It can definitely pay to share the wealth.

Mark E. Battersby is a tax and financial advisor, freelance writer and columnist. His syndicated weekly column on topical small business tax matters is carried by more than 60 newspapers.
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If you travel to the town of Davie, Fla., (pop: 75,000), you won't find Rolling Hills Golf Course, the site where the movie Caddyshack was filmed. In its place is the new Grande Oaks Golf Course and Country Club, a development that is quite possibly unique in this country. It was a construction project that literally put trees first. Through the unprecedented cooperation of the developers, architects, municipalities, contractors and an arborist named Patti Hoot-McLeod, 447 prize trees were preserved without a single loss throughout the massive golf course and site renovation. It was a project that tested Hoot-McLeod’s expertise, but its success is testament to the value of tree professionals and the role they can and should play on golf courses.

The project began early in 1998 when Hoot-McLeod received a phone call from Terry Mock of the Florida Champion Tree Project. Hoot-McLeod, who was supervisor of landscape services for the city of Pembroke Pines, is fierce in her support of trees. She has spent literally thousands of hours educating city officials, county commissioners, homeowners and schoolchildren about the value of trees and their proper care. The Florida Champion Tree Project is one of many volunteer organizations she supports. The group travels the state to identify and preserve native, historic and otherwise special trees.
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Mock asked Hoot-McLeod to visit the Grande Oaks site prior to construction to measure the trees and see if they qualified for “champion” distinction. If champion trees are found, developers are required by state statute to refrain from disturbing them.

Hoot-McLeod made an appointment with the developers, Florida Panther Holdings, who granted her a half-hour meeting. Initially the visit was just a courtesy to accommodate a “tree hugger,” Hoot-McLeod said, “but that half-hour meeting turned into a four-hour meeting, then lunch the next day, then dinner.

“In all my years in this business,” she says, “I can honestly say that I sway people to see things my way. I come out with my guides and arboriculture material and explain the hazards, the risks and the value of the trees. I explain the reality—this is what the client needs, this is what the tree needs, this is what the city wants, so let’s come up with something that works.”

The developers were swayed. A few weeks later, she was named arborist of the golf course. She began work immediately, conducting a full survey and health evaluation of the existing trees on the site, referenced to a topographic map. The trees were numbered with the assistance of a surveyor. She found 447 champion trees, all with calipers from 90 inches to more than 200 inches, among 32 established hammocks of oaks.

“They then knew they had something of extreme and rare value,” Hoot-McLeod recalls. “In south Florida, in the middle of urbanized Broward County, you’re hard pressed to find a shade tree, let alone the canopies that we have here.”

Hoot-McLeod worked closely with the developers and architects, and together they determined the parameters of the construction areas in relation to the trees. Root protection zones were identified that extended about 10 feet out from the trees’ drip lines.

While the developers and architects had come to appreciate the value inherent to the site’s trees, Hoot-McLeod also needed to gain the cooperation of the contractors and subcontractors. Every Tuesday a construction meeting was held. At each and every meeting, “I reiterated and re-instilled in everybody’s mind from day one that no harm should ever come to any of these trees,” she says.

After every tree throughout the site was root pruned, construction fencing was put up encircling the root zones, so every hammock was fenced in and protected. If any of the contractors hit the fencing, they were responsible for getting it back up immediately. All construction stopped if anybody went into a root protection zone.

Root pruning and fencing began in February and was
completed by April. At the same time, Hoot-McLeod treated the soils with a mycorrhizal fungal inoculant. Tree House, a respected tree nursery and retail dealership in Florida, applied MycorTree Root Saver granular vertimuth inoculant to the roots of approximately 40 trees located around the club house. The granular formulation was spaded or cored in on all root pruned areas and cart paths.

"These trees were on a golf course that had been getting water every day, sometimes twice a day," she relates. "For this project, for the next year, I knew I was going to be stressing the trees to their absolute max. My reputation was on the line. I told myself, ‘Patti, don’t lose anything.’"

One area of the course was slated for total renovation and grade changes. From that area, Hoot-McLeod had 33 20-year-old trees of approximately 20-inch calipers moved by tree spade in April to a temporary holding area. "We built a nursery on-site with drip irrigation systems. Everything remained watered, inoculated, pruned and inspected every three days until we moved them back again. We had to move them in the heat of summer, but they’re all doing fine."

Cranes were used to replace the 33 trees. Their previous site was reconfigured into huge berms, and "we couldn’t spade onto mountains," she explains.

All native tree species were kept on the site. New trees, each a minimum of 18-feet tall, were added for color. No construction was conducted under the hammocks to maintain their root zones, with one exception. The developers were forced to run a storm drain through one of the hammocks.

"You know you’re going to cut some roots when you do that," she admits, "so we traced back the roots to make sure we had clean cuts on everything. The exposed root zone was completely covered with the MycorTree product, backfilled and watered in. The trees never even dropped their leaves."

Hoot-McLeod faced many surprises throughout the project. The developers built a lake around a huge 100-plus-inch-caliper ficus on a raised mass of soil. Hoot-McLeod set out for the newly created island to prune a major branch that had a large 36-inch piece of decayed bark caused by a years-old lightning strike. She was shocked to find there was no
Consulting Suggestions

Patti Hoot-McLeod, of Patti Hoot-McLeod Consulting in the Town of Davie, Fla., recommends the following tactics when working on major construction projects:

- Educate, educate, educate. The more clients learn about the trees, the more they value them as assets that need to be preserved and properly cared for.
- Use association and society guides and materials as teaching guides. They add credibility to your message.
- Make sure your tree surveys are accurate and complete. The complete survey is the proof behind a property’s tree values.
- Hold frequent, regularly scheduled meetings with all participants in the construction process.
- Make sure that trees are an agenda item at each and every meeting.
- Get the full support of the developer/owner of the construction site on enforcing the rules to protect trees.
- Manage tree stress before, during and after construction process.
- Be prepared for surprises.
- Stick to your convictions about trees; you are the expert.

Trunk behind the hole: the tree was completely hollow, except for a mass of roots that extended well into the trunk space. It required 23 cans of expandable spray foam to fill the hole.

There was another surprise—root depths varied drastically throughout the course. In south Florida, trees commonly have shallow root systems. The water table is usually just two feet below the soil, and depths to four feet are rare. When the old clubhouse was excavated, Hoot-McLeod found massive tree roots extending down to ten feet.

“That surprised us a lot,” she says. “In south Florida we’re trained that all your roots are within the first four inches, and you always have root mass to 12 to 16 inches. After the first 16 inches, you usually hit lime rock. But here we had root mass down to ten feet.” Local arborists and soil specialists invited to see the phenomenon were baffled.

A tractor driver experienced the biggest
shock Grande Oaks had to offer. One day while excavating the clubhouse, the driver leaped from the tractor yelling “bones, bones!” Construction was immediately halted and an archeologist was called in to inspect the 3,000-year-old Indian bones. As soon as the archeologist was in place, construction began again nearby.

“So they had the bone guy and the tree lady,” Hoot-McLeod laughs. “When we did that storm drain, he looked for bones, and I looked for root hair. He found no bones there, so I taught him about tree roots. Everybody just got along very well with each other.”

After the archeologist identified all the bones found on the site, the remains were re-buried and the architects contoured the course away from that particular area.

As soon as the water came on line, the trees and course soils were fertilized and the turf areas were seeded or sprigged. The developers wanted the trees heavily pruned to release more sun onto the turf. Hoot-McLeod encouraged them to use shade-tolerant sod on the storm drain area under the hammock, but in other areas, she admits she had a hard sell. She convinced them to allow her the time to watch the sun, to see how it effected each one of the hammocks and each of the greens. The crew then “followed the sun” to guide their pruning, which was limited to only the bottoms of the trees.

“It was a challenge.” Hoot-McLeod notes. She and Seth McDonald, the arborist pruning the trees, convinced the developers that to open up the canopies and remove the mass of branches wasn’t going to give them any more sun.

Although Hoot-McLeod is not a golfer, she’s convinced the golf course is an award-winner. “I’ve been in construction and development my whole life, and I know when I see something grandiose,” she says.

With opening day scheduled for February, Hoot-McLeod is pleased with the results and her rate of zero tree losses. While she realizes it may take several years to see if the trees have fully escaped transplant shock, she’s happy with their size. “They’re bigger than they were a year ago. They’re so dark green, they’re almost black they’re so green.”

She remains the Grande Oaks arborist. She left her position with the city to become a private consultant and is pursuing an environmental science degree to complement her landscape degree from Broward Community College. The Grande Oaks project, she admits, may have been a once-in-a-lifetime undertaking.

“The Town of Davie was instrumental in ensuring that the developer hired an arborist and had someone on the site at all times during all phases of the construction. It’s rare. On this project, the developer, municipalities and consultants all worked on the same plan for the same results,” she says. “There was no war.”

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Of course, if you did something it was done right. Have you found, however, that as your business has grown—and you have hired others to take over some of your duties—you just can’t let go. Do you still feel the need to manage and oversee everything? If so, small-business consultants say you are slowing your firm’s growth. How?

1. You can’t see the forest for the trees. If you are still involved in deciding every small detail, you aren’t focusing on the larger picture. You can’t develop a two-year or five-year strategic plan if you spend your precious time sharpening chipper knives because “no one else does it right.”

2. You can’t do it all forever. As your business has grown, the sheer volume of details and decisions has grown too. If you try to shoulder then entire burden, your stress levels will rise to the point where burnout is a very real danger.

3. You are hurting your employees and increasing turnover. Employees won’t develop if you won’t let them. In today’s tight labor market, employees want to work for a company that will increase their skills and provide advancement opportunities. It won’t take them long to discover that you still hold all decision-making power.

What can you do?

♦ Hire the most skilled employees you can afford, then leave them room to do their jobs.
♦ Stress training for new or unskilled employees, then don’t confuse over-management with never-ending training.
♦ Take a vacation. The business will survive your short-term absence.
♦ Start working on a strategic plan for your business. If you don’t know where you want the company to be in five years, you (and your employees) won’t know how to get there.

Do Your Employees Want a Retirement Plan?

Maybe not, according to a survey this summer by the Employee Benefit Research Institute. The Institute asked small business owners whether they offered retirement plans, and if not, why not. The answers were surprising.

At small firms like tree care companies (defined as businesses with fewer than 100 employees), only 29 percent offer employee retirement benefits.

According to company owners—while the high cost of a retirement plan is a major disincentive—the main reason they don’t offer retirement plans is because workers aren’t that interested. Among those that do have plans, only 21 percent of workers have signed up. Why aren’t employees concerned about retirement?

The survey found two main reasons:

1. Small businesses tend to have younger, more transient employees. Workers in their teens and 20s who know they won’t be at this job long don’t care about a retirement plan.
2. Employees rank money and health insurance higher than a pension plan.
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Raffle Benefits Industry Safety

This year's Wood/Chuck Chipper Raffle to benefit the National Arborist Foundation (NAF) was a tremendous success. The raffle generated waves of excitement on the trade show floor at TCI EXPO '98 in Baltimore from the start of the show until the moment of the drawing.

"Absolutely incredible," is the way Dennis Beam III of Wood/Chuck Chipper Corporation described the raffle. "This is amazing, and just thrills me to death. Our company is very proud to be involved with the NAF, and we are fortunate to have the financial support of so many arborists this year. This is truly a time to celebrate our industry's strengths."

The chipper was a brand-new, custom-painted Wood/Chuck W/C 17 with an 82-horsepower Deutz Turbo engine courtesy of Engine Distributors, Inc. The proceeds of the raffle, which amounted to over $20,000, will be used to develop chipper education and safety training programs. "Through the NAF, we will be able to help the entire industry become safer," says Beam. "This will benefit everyone."

The chipper winner, Michael Naglieri, of M.A.N. Tree Maintenance, Inc., in Mahopac, N.Y., knew just how he would get the chipper back to his company. "I had already bought a new truck from Schodorf, which I planned to pick up at TCI EXPO. I had a strong feeling that I might win the chipper, and it would make the trip home with me."

Naglieri, who has been an NAA member since 1995, wasn't certain he had won at first. "I thought I heard my name over the loudspeaker, but I wasn't sure," he recalls. "I asked someone 'what was the name of the person who won the chipper?' When he responded, 'someone named Michael from Long Island,' I went ballistic. I immediately ran over to the Wood/Chuck Chipper booth area. After I won, Dennis Beam of Wood/Chuck spent about 45 minutes with me teaching me about this machine. It looks like a very well made machine."

Needless to say, Naglieri says that TCI EXPO '98 was a great show. He went primarily to learn and see what's new in the industry, but he also arrived with high expectations. He had "good vibes" about the contest.

John Hendricksen, chairman of the Foundation, thanked Wood/Chuck for the donation. "Through their generosity, we are able to develop programs that will ultimately benefit everyone in the industry, especially those in the field. To Dennis Beam III and the Beam family, hats off to all of you for making this possible."

Pam Hendricksen, an NAF trustee, took to the show floor dressed as a woodchuck to help chew up interest in the raffle. "When presented with the concept, I said I would do it," she says. "The words just popped out of my mouth. It was kind of out of character for me, but I decided to do it for the cause of the Foundation."

She has some words of advice for the next trustee who might volunteer for character duty: "Don't wear heavy clothing," she notes. As a result of her portrayal, she has a better appreciation for the Disney characters who wear costumes all day long. She also offers a lighthearted warning: "When I volunteer to do this in the future, it's going to cost everyone another dollar if they ask 'how much wood does a woodchuck chuck?'."

Paul Wolfe II, president of the NAA noted the program supports a worthy cause. "What Wood/Chuck Chipper is doing is a tremendous example on how Associate Members can become an integral part of the NAF. Thanks to Wood/Chuck's leadership, the entire industry prospers."
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'91 GMC Topkick w/cat 3116 diesel and Allison automatic transmission, w/AL50 Aerial Lift of Connecticut and chip box, 68K miles, excellent condition, $50,000 O.B.O. Welborn Tree Service, Inc., 3316 Highway 394, DeRidder, LA 70634. Phone: (318) 462-6746.

1988 Ford F450 for sale: Arbortech 9-cubic-yard chip box, 7.51 CID V8 engine, 4 speed w/overdrive, 84,000 miles, Full cage cab protector. Asking $16,782. For picture see web site: www.treespecialists.com or call 888-873-3435.


Aerial Equipment Inc. Used Equipment and Arborist Supply Specialists in the Midwest. Buy Now and Save - two 1993 Vermeer 665 Bs - diesel powered - 3 used disc chippers starting at $8,300. Call Ron or Joel for details: (847)398-0620. Wheeling, IL 60090.


Can your stump cutter operate for $3 an hour and go anywhere? Ours can. The Alpine Magnum weighs just 88 lbs., can operate near fences, walkways, buildings, and sidehills. It can clear brush, dig shallow trenches and maneuver over soft ground without making tire tracks. Call or write: Alpine Machine, 7910 Thornbury St. S.W., Olympia, WA 98512-2368. (360) 357-5116.

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All types and brands of professional climbing and lowering arborist ropes at warehouse prices. Call for current price list. Free shipping. Visa, MC, AX. Small Ad - Big Savings 1-800-873-3203.

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Some people might be tempted to choose our high-end ropes for their vibrant colors alone. But for tree care experts, the real beauty of a Yale Cordage rope lies in its performance. Every rope we create is manufactured to our stringent standards. We simply won't sell a rope with broken filaments, improper tensioning, or strands that are uneven, twisted or off-sheen. As a result, each Yale rope provides the strength and wear resistance arborists demand — for long-lasting performance that starts at the surface — and goes all the way to the core.

For more information and a free sample of our best selling XTC rope, write to the address below.

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Brush Bandit Chippers
(1) Mighty Bandit; (1) Model 65, Honda 20 HP gas; (1) Model 90W, Cummins diesel; (3) Model 100, Continental diesel, Hercules gas; (4) Model 200+, Hercules & GM gas, John Deere & Cummins diesel; (3) Model 250, John Deere & GMC gas; (2) Model 280, Cummins diesel.

Bandit Whole Tree Chippers
(2) Model 1250, Cummins diesel; (3) Model 1254, Cummins diesel; (2) Model 1290, drum, Ford 423 65 hp gas; (1) Model 1400, Cummins diesel; (1) Model 1450, Cummins diesel; (1) Model 1690, Ford gas; (2) Model 1900, Cat diesel.

Morbark
(1) Model 10, John Deere diesel; (1) Model 16, Cummins diesel; (2) Model 17, Cummins & Perkins diesel; (1) Model 290, Cummins diesel; (4) Eger Beever, Wisconsin & Ford gas, Cummins diesel.

Vermeer
(2) Model 1250, Perkins diesel & Ford gas.

Miscellaneous
(1) Asplundh 12-inch drum, Ford gas; (1) Asplundh 16-inch drum, Ford gas; (1) Wayne drum, Chrysler gas; (7) Mits & Merrill 6-cylinder gas torque; (1) Chipmore drum, Ford gas; (1) Wood Chuck 16-inch drum, Ford V-8 gas; (1) Duratech HD-8 tub, Cat diesel; (1) Innovator ATG 20001 8-inch tub, Cummins diesel; (1) Fuel Harvester P-10350 tub, Cummins diesel.

Bandit Industries, Inc., 6750 Millbrook Road, Remus, MI 49340. Phone: (800) 952-0178; Fax: (517) 561-2273.

48-Inch Montgomery Hog
12V 92 Detroit, twin turbo mounted on Low Boy trailer, $ 30,000 Call Ray at 914-565-7210.

LOG LOADER, 1986 Brig. 10 wheel, diesel, 48,500 GVW, with 86 Prentice 120 & log bunks, $28,500. 1992 RAYCO 102 hp Model 1675DXH, $12,500. 1988 F800, diesel, 28-yard chip box, $17,500. BUTT SPLITTER, 4-6 way split, 50-inch diam. x 4-foot lengths, less power, $18,500. Call (978) 256-0341.
Southco Industries, Inc.

**Model: S-1472**
(20 CU. YD. Capacity)

**Specifications:**

**A. General:**
1. All G-60 Galvannealed Material (zinc coated, resists rust)
2. All Wiring in Conduit
3. Sealed Lexan Lens Lights Meet FMVSS 108 Specifications
4. Anti-Sail Mud Flaps
5. Hoist with Power Take Off
6. Trailer Light Connector, Six Pole
7. Pintle, Pin, or Pintle/Ball Combination Trailer Hitch with Tow Hooks
8. Bodies: Mounted, Undercoated, Chemically Degreased, Coal Tar Epoxy Coating inside Chip Box, Primed and Painted
9. Stainless Steel Hinge Pins with Grease Zerks
10. Weatherproofed Tool Boxes
11. Chipper Air Exhaust Vents

**B. Overall Body Dimensions:**
- Length: 168"
- Height: 72" (Inside)
- Width: 92"

**C. Chip Box Material:** (Galvannealed)
1. Floor: 10-ga. plate
2. Sides & Front: 12-ga. plate
3. Top: 14-ga. plate
4. Tailgate: 12-ga. plate with tubing frame (270° swing)
5. Runners: 8" structural channel
6. Cross Members: 3" structural channel
7. Rear Vertical Support: formed 1/4" plate
8. Rear Horizontal Support: 4" x 4" x 1/4" square tubing

**D. Tool Boxes: (14-ga. Galvannealed)**
1. Underbody Tool Boxes:
   - (two) 48" long x 20" high x 20" deep

2. "L" Cross Box:
   - 24" long x 92" wide x 26" high across chassis rails
   - Door: 24" long x 48" high; six rope hooks, stationary shelf and water cooler holder

3. Ladder Box: (inside chip box)
   - 143" long x 17" wide x 27" high

4. Pruner Box: (inside chip box)
   - 168" long x 17" wide x 12" high

5. Locks:
   - Slam, keyed with hidden theft resistant rods

**E. Optional**
1. Tool boxes and Step-Type Rear Bumper
   - Behind rear axle 34" long x 20" high x 20" deep
2. Cab Protector
3. Top Ladder Rack with Access Steps
4. Electric Trailer Brake Control
5. Wheel Chocks and Holder

**NOTE:** Chassis Cabs Available to complete the package 102" CA Chassis Cab required.

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USED EQUIPMENT

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Chip Trucks

Digger Derrick
1994 HyDro-Ax 411E, 16-inch shear, 23.1 x 26 rubber - 50 percent, 2,700 hours, mint condition, $63,000/B.O. Call Bradley Tree at 603-886-3435.

The new Valley Top Roll (patent pending) feed system makes all other processors obsolete. Faster and easier to operate. Valley Processors Inc., 413-253-4867.

It is common sense that electric wires can be hazardous to anyone doing tree work. OSHA Standard 1910.331 states that only qualified employees can come within ten feet of an overhead energized electrical conductor. Plus, OSHA Standard 1910.269 clearly defines who is legally permitted to work within the ten foot boundary. Finally, ANSI Z133.1 dictates very specific training and operational requirements that all tree care personnel need to follow for safety's sake.

NAA Training Makes Sense. The National Arborist Association has exactly the training you need, whether you are a residential/commercial arborist or municipal arborist. It's our Electrical Hazards Awareness Program. EHAP offers a simple, economical and practical way to provide training needed by your employees. This program creates awareness of electrical hazards, which is absolutely essential for all tree workers. Plus, EHAP can be used by line clearance tree workers to supplement mandatory training requirements specified in 1910.269. Like all NAA training materials, EHAP is easy to use and easy to apply. The program is self-paced, to put your employees in control of meeting their goals, and presented by you, to keep you in control of your business. For more information about EHAP, or any NAA program, or to order, call our toll-free hotline, or send/fax the coupon below.

National Arborist Association
P.O. Box 1094, Amherst, NH 03031-1094
Fax: (603) 672-2613

☐ YES I'm ready to provide my personnel with training in Electrical Hazards Awareness.
☐ I'M interested in the EHAP program. Please send additional information.

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*RETAIL: $135.00 per enrollee; MEMBER DISCOUNT PRICE: $85.00 per enrollee. If ordering, please include a list of enrollees.

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Classified ad rates: $60 per inch ($50 NAA members)
1-inch minimum. Payable in advance, due 20th of the month, two months prior to publication.
Send ad and payment to: TCI, PO Box 1094, Amherst, NH 03031.
Don't Miss These Educational Sessions at Winter Management Conference!

Hotel reservations should be made as soon as possible. Please remember to reference the NAA when making your hotel reservations by calling 1-888-594-2483.

This is truly a busy time of year for traveling to Cancun, Mexico. Don't wait to make your plans, including airline reservations. Travelers to Cancun are required to have either a valid passport or a notarized birth certificate and picture identification.

The NAA's Winter Management Conference is the most comprehensive business conference for the tree care industry. This year's line-up is sure to provide cutting edge information on ways to make your tree care business more profitable in 1999. The topics and speakers featured are:

"Beyond Customer Service"

Based on Robert Tucker's acclaimed book Customer Service for the New Millennium, this program teaches you how to gain long-term customer loyalty by delivering what he calls, "Best total solution." You'll learn how to profit by redefining your company's Value Proposition, how to gain greater perceived value from your sales force and how to involve everyone on your team in delivering superior customer value.

"The Changing Role of the Manager"

Historians state that we have not witnessed a time of change like this during the past 500 years. In order to effectively manage/lead others, we must change our role accordingly. Mark Towers leads a "hands-on, how-to" program that will be educational, motivational and fun.
"Strategic Market Positioning"

Think STRATEGICALLY! Learn how Strategic Market Positioning will give your company a competitive advantage and ensure that customers drive past alternatives along the way to you. Peter Johnson breaks this presentation into three key ingredients that separate the top achievers from the "tryers": positioning the company, the market and the product. The ultimate in Strategic Market Positioning is achieved by combining all three.

"Preventing Job Burnout"

Many Americans experience job burnout. Robert Ash explains how both employees and employers can reach a point in which they begin to lose some of their value to the organization because they do not care, they are not longer challenged by the job, or stress of the job causes both mental and physical problems. How can burnout be prevented?

Conference Sponsors

The NAA is grateful for the long-term support of its Associate Member companies who bring their energy, talents and financial resources to Cancun, Mexico, January 26-31, 1999. Manufacturers and distributors who have made a great difference are:

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For more information, contact the NAA at 1-800-733-2622.

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<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ACRT, Inc.</td>
<td>43</td>
<td>2. Altec Industries, Inc.</td>
<td>59</td>
</tr>
<tr>
<td>11. Border City Tool &amp; Manufacturing Co.</td>
<td>30</td>
<td>12. CAG, Inc.</td>
<td>62</td>
</tr>
<tr>
<td>17. FCI/Racine</td>
<td>7</td>
<td>18. Fanno Saw Works</td>
<td>58</td>
</tr>
<tr>
<td>23. Green Manufacturing Inc.</td>
<td>56</td>
<td>24. GreenPro Services</td>
<td>28</td>
</tr>
<tr>
<td>29. Jameson Corporation</td>
<td>21</td>
<td>30. Lewis Utility Truck Sales, Inc.</td>
<td>48</td>
</tr>
<tr>
<td>33. NAA - Electrical Hazard Awareness</td>
<td>63</td>
<td>34. NAA - Membership</td>
<td>67</td>
</tr>
<tr>
<td>35. NAA - The Treeworker</td>
<td>51</td>
<td>36. New England Grows!</td>
<td>37</td>
</tr>
<tr>
<td>37. Northeastern Associates</td>
<td>68</td>
<td>38. Opyke, Inc.</td>
<td>32</td>
</tr>
<tr>
<td>41. Rapco Industries Inc.</td>
<td>36</td>
<td>42. Rayco Manufacturing, Inc.</td>
<td>11</td>
</tr>
<tr>
<td>43. Roots, Inc.</td>
<td>Inside Front Cover</td>
<td>44. Royal Truck &amp; Equipment Inc.</td>
<td>55</td>
</tr>
<tr>
<td>45. SavATree</td>
<td>53</td>
<td>46. Schodorf Truck Body &amp; Equipment Company</td>
<td>45</td>
</tr>
<tr>
<td>47. Sharp Tool Company, The</td>
<td>36</td>
<td>48. Sherrill, Inc.</td>
<td>64</td>
</tr>
<tr>
<td>49. Shindaiwa</td>
<td>Inside Back Cover</td>
<td>50. Southco Industries, Inc.</td>
<td>61</td>
</tr>
<tr>
<td>51. Southeastern Equipment Company</td>
<td>29</td>
<td>52. Tamarack Clearing, Inc.</td>
<td>47</td>
</tr>
<tr>
<td>53. Tamarack Clearing, Inc.</td>
<td>41</td>
<td>54. Terex Telelect, Inc.</td>
<td>3</td>
</tr>
<tr>
<td>55. Timberwolf Manufacturing Corporation</td>
<td>24</td>
<td>56. Tree Tech Microinjection Systems</td>
<td>52</td>
</tr>
<tr>
<td>57. Vermeer Manufacturing Company</td>
<td>5</td>
<td>58. VERSALIFT, TIME Manufacturing Company</td>
<td>27</td>
</tr>
<tr>
<td>59. Weaver Leather, Inc.</td>
<td>58</td>
<td>60. Western Tree Equipment &amp; Rentals</td>
<td>21</td>
</tr>
<tr>
<td>61. Yale Cordage Inc.</td>
<td>60</td>
<td>62. Zenith Cutter Company</td>
<td>40</td>
</tr>
</tbody>
</table>

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One of my clients, the Brooklea Country Club, in Rochester, NY, hired a wood carver, Mr. John Dempsey, to create a statue of the golf course designer, Don Ross. Due to a defect in the tree, the carved statue was forced to face away from the golf course rather than toward it. We were hired to correctly re-position the statue. We secured the base area with wood rods, cut a slice off of the base of this massive old oak, and with our crane, lifted and turned the statue so that it was overlooking one of the fairways he designed! We then secured the statue to the base. This was a very unusual job that put a lot of tree care skills to the test. Our field staff of trained technicians are proud of their small triumph in accomplishing this task without damaging a piece of art work that had many hours of labor in it. As you can see, the statue holds an honored spot on the course.

John Van Staalduinien is an arborist with The Davey Tree Expert Company in Rochester, NY.
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