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This high performance Diesel Xtra Heavyduty machine has huge cutting dimensions and is constructed for the big work. Plus it has the smooth cutting action and low maintenance of a hydrostatic drive system. Best of all, this performance is built into a sleek, compact chassis for maneuverability in confined residential premises.

The level mounted engine protects the diesel power plant from failure caused by oil starvation. The no tilt engine and low profile enables this RAYCO to operate on grades 200% steeper than other Stump Cutters.

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“The Stump Cutter People”
Overall Body Dimensions:
Length 138” Height 60” Width 92”

Chip Box Material: (galvannealed)
1. Floor ...........................................10 ga. plate
2. Sides (removable) 3'-6" high . . (2)pc. design-12 ga. plate
3. Top: (removable) 8' long .........14 ga. plate
4. HeadBoard (stationary) .............12 ga. plate
5. Tailgate (270° swing) ...............Expanded Metal
   w/tubing frame
6. Runners ..............................6" structural channel
7. Cross members .................3” structural channel
8. Side vertical supports .........3” x 3” sq. tubing

General
1. All G-60 galvannealed material
2. Sides: Fabricated in (2) pcs. for easy removal
3. All wiring in conduit
4. Sealed lexan lens lights meet FMVSS 108
   specifications
5. Anti-sail mud flaps
6. Hydraulic dump hoist
7. Safety body prop
8. Trailer light connector 6 pole; Elec.
   back up alarm
9. Pintle; or pintle/ball combination trailer
   hitch with tow hooks
10. Bodies: mounted, undercoated, coal tar epoxy
    coating inside chip box, primed and painted
11. Stainless steel tool box hinge pins
    w/grease zerks
12. Tool Boxes - "Weatherproof" - Bulb type weather
    stripping
13. Top includes (4) corner lifting eyes
14. Chipper Air Exhaust Vents

Tool Boxes (14 ga. galvannealed material):
1. Underbody tool boxes:
   (two) 48” long x 20” high x 17” deep
2. Locks: Slam locks, keyed alike with hidden
   theft resistant rods

Cross Box:
1. "L" cross box - which includes
   underbody tool box
   Cross box: 24” long x 92” x 37” high across chassis
   rails; (6) swivel rope hooks; (1) shelf; (3) gal. water
   cooler holder

Optional:
1. Top ladder pruner rack

NOTE: Chassis cabs available to complete
package 84” C/A Chassis cab required
One Simple Difference Can Make or Break Your Business

I don’t know about you, but I continue to run into a business style that I find absolutely unacceptable in companies that are paid to provide a service. This way of doing business can devastate companies that depend on word-of-mouth referrals to survive.

See if this sounds familiar. My husband and I had the unfortunate need of the fire department within the last year when we noticed a plume of smoke rising from a hole between an external lighting fixture and the main foundation of our house. To make a very long story short, the fire chief wanted an electrician on site immediately to sort out the problem. After frustrating calls to three different electricians, all of whom heard the words, “the fire chief wants an electrician here now,” the fourth company showed up in less than 15 minutes. Guess who has received our business when we have needed electrical jobs performed since then?

Another example: Phone calls were made to painting contractors who were asked to submit a bid and projected starting time to paint our house. Two weeks later, one bid is in hand.

Another example: A nationally known moving company was scheduled to move our lives to New Hampshire from Georgia. We were promised an arrival and a departure time. We were told to be up and ready by 7 a.m. to begin loading. When the truck finally arrived at 12:30 p.m., they were not able to pack all of our belongings in a single, shortened day. Of course, our schedule, which presumed they would be on time and finish in one day as promised, involved airline reservations and other plans. Can you guess who won’t have our business in the future?

From the customer’s side, these are not particularly complicated issues. It’s very simple. We need work done by professionals in different areas of our lives. We would like our calls returned in a timely fashion. We would like to receive bids on our jobs within a reasonable period of time. We would like crews to show up on time. We would like the quality of the work promised to match the quality of work received. It’s really not difficult to satisfy customers.

In today’s world, however, the basics of business seem to have been forgotten. Simple things like honesty in business; ethics; use of quality materials; good manners when speaking to customers; follow through on promises (or a phone call if circumstances change) seem to have become foreign concepts. If the customer does not keep an eagle eye on what is happening, it seems the likelihood of receiving quality service is rare.

Arborists have come so far in the last 30 years. Excellence in business management is becoming the accepted standard for how we do business. Consumers recognize the special skills required for our industry’s work as a skilled profession. We need to think proudly and highly of the work we do. In order to command respect from others—customers, peers, other professions, and our business communities—we must provide our services in a very business-like and respectful way.

So set yourselves apart in business. It doesn’t take much. Simple things will put you out in front of others. Remind your crews every day that they are your best marketing tools. It’s not just the quality of the work they do; it’s how they do it ... how they interact with your customers ... how they respect the properties they are on ... how timely they are ... how they follow through. Those are the things that bring you the right kind of word-of-mouth advertising. Doing it right really does matter. What’s more, it’s really simple.

Cynthia Mills, CAE
Publisher
1996 - 1998
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SEPTEMBER

continued on page 6

Features

8 Resolving Storm Emergencies
   By Steve Sandfort and Thomas P. Webster

24 Business Planning in Three Easy Steps
   By Phil Nilsson

30 Power Pruning Pointers
   By Richard C. Howland Jr.

38 PHC & Arboriculture in the 21st Century
   By Dr. David G. Nielsen

Departments

2 Outlook
   By Cynthia Mills, CAE
   One simple difference can make or break your business.

18 Branch Office
   By Wayne Outlaw
   Measure employee satisfaction. The level of satisfaction within your company determines its success and profits.

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

34 Washington in Review
   By Peter Gerstenberger
   OSHA receives a two-day lesson in the benefits and processes of Z133.

8 Storm Emergency: Is Your Town Ready?
Some day, your town will be hit hard by a natural disaster. This month's cover story details one city's response with suggestions about successfully handling a similar emergency.

On the Cover

Cover photo by Rod Whitlow, a landscape designer and horticultural photo-journalist in Wilton, Calif.
Squeezing Through The Back Gate, Or Slicing Through The Back Nine. A Great Place For Vermeer.

When you need more power and less width for your stump-cutting applications, go with the right equipment — go with Vermeer.

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SEPTEMBER
continued from page 4

Department

Industry Almanac
Important regional and national meetings and activities

NAA Forum
Excellence in Arboriculture Awards program and National Day of Service at Arlington National Cemetery receive national recognition.

Management Exchange
By Mark E. Battersby
Tips on reducing taxable income through proper consideration of timing, depreciation, Section 179 deductions, shifting income, entertainment expenses, gifts, and professional expenses.

Classified Advertising
Help wanted, services, businesses, new and used products for sale

ISA Conference
Results and profiles of contestants in International Tree Climbing Championship.

Readers' Forum
By Cass Turnbull & Michael R. Pack
A report on an invitational round-table discussion on the topic of thinning conifers to increase stability in high winds.

From the Field
By Bill Holcomb III
A sense of history is important to evaluate the past 20 years of industry progress.

Center TCI EXPO '99 Registration Brochure
Everything from equipment, products and services to hands-on educational opportunities will be on display at TCI EXPO '99. Register today! See the brochure in the center of this magazine.

Plant Health Care and Arboriculture
As demands for quality increase and better-educated arborists enter the workforce, tree care professionals will be forced to improve their understanding of basic plant growth processes and to enhance their level of service and professionalism. The information age mandates that we all continue to learn if we wish to compete successfully for clients.

TCI's mission is to engage and enlighten readers with the latest industry news and information on regulations, standards, practices, safety, innovations, products and equipment. We strive to serve as the definitive resource for commercial, residential, municipal and utility arborists, as well as for others involved in the care and maintenance of trees. The official publication of the non-profit National Arborist Association, we vow to sustain the same uncompromising standards of excellence as our members in the field, who adhere to the highest professional practices worldwide.
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2500-4
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• Full Hydraulic Control • 35" Width

3500
• 35 Horsepower • Compact Tow Behind • Large Cutting Dimensions

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• Self Propelled

4400-4
• 44 Horsepower Diesel • Remote Control Available • Most Powerful Portable

7500
• 75 HP Diesel • 1 1/2" Thick 31" Diameter Cutterwheel • Suspension Available • Remote Control Available

Hurricane
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It has not already happened, it will. Your town will be hit hard by a natural disaster and you'll get caught (usually with your pants down!) working to restore order and resolve the situation. Be it a hurricane, tornado, linear wind, snow or ice storm, the chances are high that many trees will be quickly destroyed or damaged and must be dealt with. Cincinnati, Ohio's experience with The Davey Tree Expert Company and other contractors in resolving damage from a 1989 snow storm was a good one for all parties and might offer you suggestions about successfully handling a similar emergency.

The Urban Forest Management Section's fall planting of 3,000 street trees, preventive maintenance pruning on another 3,000 large trees and routine emergency work along 1,000 miles of streets was well under way. All work was contracted to local landscape and arborcultural firms, with Davey performing some of the preventive maintenance and all of the emergency work.

The annual emergency contract, which had been bid at $65,000, called for one fully equipped aerial lift, a two-person tree crew to work for Forestry full time, and reserved the right to call in a second crew to resolve normal storm emergencies. However, when everyone was finally able to sigh, sit back and proclaim the snow storm history, almost $400,000 was added to Davey's contract to pay for the 15 tree crews supplied from around the country for a month of ten-hour days.

Although the heavy, wet snow that began to fall on Thursday, Oct. 19, lasted from 1:00 a.m. until 8:00 a.m., it resulted in massive damage across the city because all of the trees were in full leaf. The Highway Maintenance dispatcher called the City Forester at home at 7:30 a.m. to report that a light wind, coupled with the heavy snow load, was breaking down trees. He asked for crews to help open streets. The City Forester immediately called Davey's office and found work crews already assembling because they knew the call was coming.

Within an hour Davey had their total local compliment of five crews rolling to the most critical sites described by Highway Maintenance. The five-member Forestry staff had been asked to inspect the situation around their own neighborhoods before arriving at City Hall. Assistant City Forester Tim Jacob was in the office by 7:00 a.m., setting up a computer program and various forms to log telephoned service requests by date, name, address, phone number and type of problem.

After the staff arrived and a short planning conference was held, a two-day routing schedule for each Davey crew was developed. The staff then hit the field again to inspect further. Gut reaction from everyone seemed to be that around 15 crews would be needed for slightly more than a month—if there were no more winds. Trees can hold tremendous snow loads until the wind blows.

At 10:00 a.m., the director of sanitation called Forestry to ask where all of his garbage compactor trucks and crews were needed most. Since they were already working in the western side of town, Forestry suggested that they just stay there and remove broken limbs that were down and blocking the streets. The Director of Highway Maintenance then called with the news that the sun was melting all the snow on the streets, so his ice control/dump trucks were also at Forestry's disposal. They began opening streets in the eastern half of town.

Both directors were asked to do what their crews did best—working on the ground opening the streets. Forestry's contracted tree crews concentrated on work up in the trees. They would chip what they generated, but would not deal with small debris already on the ground.

Around 10:30 a.m. Forestry again called Davey Tree and learned the home office in Kent, Ohio had begun the complicated process of moving more crews in from around the country. Davey's many residential clients had been asked to wait a few days for cleanup services until out-of-town crews could replace local crews. It was agreed to ask the home office for 15 crews, which would work seven days per week, 10 hours per day for a month.

Moving emergency tree crews from around the country is usually not a simple, inexpensive operation—even if there are emergency agreements in place. Unlike major utilities, cities usually do not have such mutual assistance agreements. Nevertheless, major commercial tree care companies are usually ready to assist. We would strongly recommend city officials meet with representatives of tree services in their area, have lunch, get to know each other, and discuss the “what-ifs” should services be needed. In this case, Cincinnati and Davey already had developed a good line of communication and trust, which helped speed the response.

As soon as it became apparent that Davey's five crews could not fulfill Forestry's needs, negotiations began between the city and management at the operations level of Davey. Hourly rates were established by adding meal and lodging costs to regular rates and agreed on with a handshake. This agreement allowed crews to arrive from Columbus, Toledo, Detroit, Indianapolis, St. Louis and Kansas City. In addition to the single crews from around the Midwest, a convoy of nine aerial lifts were on their way from Minnesota. All crews were experienced in storm damage cleanup, fully equipped and properly covered by liability and workers' compensation insurance.

Forestry provided work orders, including street maps and priority lists. Dennis Traeger from Davey's Minnesota office and the local manager provided supervision and supplies. Long-standing relationships with numerous local vendors, including Bob Summerel Tire, Milford Towing and Bryan Equipment (Stihl chain saws), provided services and supplies that helped coordinate with a bare minimum of downtime.

On a humorous note, the most frustrating experience for Davey's local manager occurred when the first $5,000 expense check to pay for per diem meals and lodging arrived from the home office without an authorizing signature. The bank wouldn't cash the check! The manager insisted that he would not leave the bank without the cash. After persis-
tent efforts, explanations and phone calls to Davey's treasurer, the bank agreed to cash the check.

The success in pulling off such a complicated event was helped by cooperative weather. The normal cold November rains held off, allowing crews to work continuously. After securing 15 tree service crews, Forestry met to form a plan of action with the Public Works Director, his managers from Highway Maintenance, Sanitation and Engineering, as well as representatives of the mayor and city manager.

First, the group selected six large areas to store all of the debris, wood chips and logs. Paved parking lots and ball fields were designated to receive the debris. The plan was to have all the wood waste converted into mulch by Christmas for use by city departments on trails, flower beds and trees. Nothing would be landfilled.

Second, it was agreed that in-house crews would continue to clean debris that had fallen into roads or been placed there from private property. This work was in addition to routine trash collection and would continue seven days per week until finished. Highway Maintenance put approximately 30 dump truck crews, many with rented chain saws, onto the streets. Sanitation added 40 garbage trucks without mixing storm debris and garbage. From the Oct. 19-22, Sanitation and Highway costs totaled $178,000. Similar costs were generated the following weekend.

Third, all agreed to set a two-week deadline for property owners to drag storm debris into city streets. After the cutoff, the city would treat debris as yard waste, which had to be cut into 24-inch lengths and tied in small bundles. Had a deadline not been announced and adhered to, people would have carried all types of vegetation to the streets for months and months claiming it came from the storm. Cities without similar policies have been plagued with “storm” debris for months afterward. As it was, some of the debris picked up within the two-week window was residue from private tree and shrub trimming that had been stored for years. Everyone was fortunate that both weekends following the storm were perfect for doing yard work, and the public got things cleaned up without challenging the deadline.

Fourth, since Forestry’s annual budget for street trees in 1989 was $1,050,000, including $65,000 for routine emergency work, Forestry was assured that additional funding would be provided from the city’s emergency reserves.

Forestry’s instructions to Davey were to service each assigned tree properly and completely. National Arborist Association Pruning Standards (now ANSI A-300) and Z133.1 Safety Standards were to be fol-
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When Forestry staff members spoke with representatives of other towns, colleges, cemeteries, and park systems in the area, they reported ongoing storm damage work as long as a year later.

Friday, Saturday and Sunday following the storm, Forestry manned its phone from 7:00 a.m. to 7:00 p.m., logging more than 3,000 calls dealing with 500 “hot spots,” including five houses and nine cars hit by uprooted trees. More than 75 trees were down and another 2,000 had broken, hanging limbs. Once the hot spots were cleaned up, tree crews were told to service the remaining damaged trees. They were also instructed to carefully inspect all other trees along each street and correct visible problems.

By Friday evening, 15 two-person, fully equipped tree crews were rolling into town. Because they were unfamiliar with Cincinnati streets, Forestry prepared a packet of work assignments, motel and hospital locations, and wood chip storage areas. The packets contained a computer printout of work locations by neighborhood along with maps ripped out of old phone books.

At 7:00 a.m. Saturday, Forestry staff met with Davey supervisors and out-of-town crew members over coffee to get the work started properly. A truck with a small crane was assigned to a neighborhood where large logs needed to be moved. One with an especially tall aerial lift was sent to the neighborhood with the tallest trees. Each crew was instructed to list the street address of any tree that needed to be removed later.

Forestry staff led crews in procession to their work areas in an effort to minimize travel time and the possibility of having a lost tree crew. While inspecting newly reported problems and doing other routine work, Forestry kept checking with their crews to lead them to their next group of streets, get chains, gas and oil for saws, and bring coffee or lunch. Davey supervisors did the same. The goal was to reduce drive time for the huge tree trucks so that work time would be maximized, because drive time is unproductive, expensive time.

At 8:00 p.m. that evening, Forestry met crews at the motel to swap completed work lists with revised ones. Forestry had to make new work assignments and keep hourly records for billing purposes.

These crews worked intelligently, safely and efficiently, 10 to 12 hours per day for 14 straight days. After two weeks of work, these crews were replaced by nine new ones who knocked out the remainder of the storm damage in two weeks.

Even though the streets were clean and thousands of snow-damaged trees were safe again, 500 trees with an appraised value of $270,000 before the storm had to be removed. Most had been severely damaged and could not be repaired, but some were simply the wrong species in the wrong places. Forestry used the storm as a good excuse to cull a few nasty, but undamaged, trees. Siberian elms and silver maples are considered inferior Street trees in Cincinnati due to common problems such as shallow roots and weak top wood that is easily damaged in a storm. These species, especially large trees in narrow spaces or those hanging over buildings and streets, pose a significant liability for the city.

Six storage areas full of debris needed to be cleaned up by year’s end, too. The two largest lots were packed with huge cubes of tightly mashed limbs, laid like eggs and left by garbage compactor trucks. You should have seen the look of terror when Forestry told Davey managers its crews would have to untangle each cube and feed the limbs through their brush chippers. (They thought Forestry was serious!)
<table>
<thead>
<tr>
<th>Model Year</th>
<th>Make</th>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>Ford</td>
<td>F800</td>
<td>5.9 Cummins diesel, 210 hp, 6sp, w/USTC 15-ton crane, 80' hook height</td>
<td>$64,500</td>
</tr>
<tr>
<td>1988</td>
<td>Mack</td>
<td>CS300</td>
<td>215 hp, 6sp, 12' dump with 5-ton Hiab knuckleboom crane &amp; winch, 35' side reach</td>
<td>$29,500</td>
</tr>
<tr>
<td>1987</td>
<td>Ford</td>
<td>LT 8000</td>
<td>7.8 diesel, 10 sp, 20' bed w/12.5-ton National crane, 101' hook height</td>
<td>$48,500</td>
</tr>
<tr>
<td>1987</td>
<td>Ford</td>
<td>LTS 8000</td>
<td>7.8 diesel, 13 sp, tandem with 6.5-ton Hiab 140 crane, 21' side reach, 22' bed</td>
<td>$34,500</td>
</tr>
<tr>
<td>1995</td>
<td>Ford</td>
<td>F800</td>
<td>5.9 Cummins diesel, 210 hp, 6 sp w/10-ton USTC crane, 66' hook height</td>
<td>$32,500</td>
</tr>
<tr>
<td>1986</td>
<td>Int'l</td>
<td>1954 DT466</td>
<td>10 sp tandem with 7-ton National knuckleboom crane, 22' side reach</td>
<td>$19,500</td>
</tr>
<tr>
<td>1986</td>
<td>Mack</td>
<td>MS200</td>
<td>diesel, 5sp/2sp with 4-ton Hiab crane, 22' side reach, 22' bed</td>
<td>$14,500</td>
</tr>
<tr>
<td>1975</td>
<td>Ford</td>
<td>LN700</td>
<td>V8, 5sp, A/B 4-ton Hiab crane, 16' side reach</td>
<td>$8,900</td>
</tr>
<tr>
<td>1991</td>
<td>Int'l</td>
<td>4700 DTA 360</td>
<td>diesel, 6sp, chip body and 51' Lift-All bucket</td>
<td>$39,500</td>
</tr>
<tr>
<td>1990</td>
<td>Ford</td>
<td>F800</td>
<td>6.6 diesel, 5sp/2sp, A/B w/51' Altec Model AN650 double bucket</td>
<td>$32,500</td>
</tr>
<tr>
<td>1990</td>
<td>Int'l</td>
<td>11500</td>
<td>14' steel dump, 52' Ringler bucket, Hiab crane</td>
<td>$19,500</td>
</tr>
<tr>
<td>1991</td>
<td>Int'l</td>
<td>2500</td>
<td>7.8 diesel, 10 sp, 18' dump body w/high sides, liftgate</td>
<td>$39,500</td>
</tr>
<tr>
<td>1989</td>
<td>Int'l</td>
<td>8000</td>
<td>Narrow cab, steel hauler, Haul long logs from front to rear, 6x6 all-wheel drive, 7-8 dsl, auto, 37k miles w/6.5-ton DMTCRANE</td>
<td>$44,500</td>
</tr>
<tr>
<td>1990</td>
<td>Peterbilt</td>
<td>320 8.3 Cummins diesel auto w/5-ton Effer Knuckleboom crane, 18' dump body w/high sides, liftgate</td>
<td>$37,500</td>
<td></td>
</tr>
<tr>
<td>1988</td>
<td>GMC</td>
<td>5700</td>
<td>8.2 diesel, auto, chip body w/Aerial Lift of CT 50' bucket</td>
<td>$37,500</td>
</tr>
<tr>
<td>1989</td>
<td>Int'l</td>
<td>8000</td>
<td>Narrow cab, steel hauler, Haul long logs from front to rear, 6x6 all-wheel drive, 7-8 dsl, auto, 37k miles w/6.5-ton DMTCRANE</td>
<td>$37,500</td>
</tr>
<tr>
<td>1981</td>
<td>Ford</td>
<td>LN 9000</td>
<td>6-71 Detroit, 8sp tandem w/4-ton Hiab Crane Model 950</td>
<td>$16,900</td>
</tr>
<tr>
<td>1991</td>
<td>Int'l</td>
<td>2500</td>
<td>18' dump body w/high sides, liftgate</td>
<td>$39,500</td>
</tr>
<tr>
<td>1990</td>
<td>Ford</td>
<td>F800</td>
<td>6.6 diesel, 5sp/2sp, A/B w/51' Altec Model AN650 double bucket</td>
<td>$32,500</td>
</tr>
<tr>
<td>1984</td>
<td>GMC</td>
<td>5700</td>
<td>8.2 diesel, auto, A/B with 52' Hi-Ranger bucket</td>
<td>$34,900</td>
</tr>
<tr>
<td>1988</td>
<td>Int'l</td>
<td>DT466</td>
<td>5sp/2sp, with 18' flat dump and Hiab crane</td>
<td>$27,500</td>
</tr>
<tr>
<td>1981</td>
<td>Int'l</td>
<td>LN9000</td>
<td>6-71 Detroit, 8sp tandem w/4-ton Hiab Crane Model 950</td>
<td>$16,900</td>
</tr>
<tr>
<td>1991</td>
<td>Int'l</td>
<td>2500</td>
<td>18' dump body w/high sides, liftgate</td>
<td>$39,500</td>
</tr>
</tbody>
</table>

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Actually Forestry had already been in touch with Morbark Industries in Winn, Mich., to locate the nearest Total Waste Recycler. MacMulch, Inc. of Indianapolis, Ind., began work under an emergency contract in mid-November and had all the debris ground into rough mulch in two weeks. The work progressed smoothly, except in area one, where public access had not been limited. At night, truckloads of storm debris were mixed with water heaters, bathroom fixtures and auto parts. At this location, two loaders and several ground employees had to sort through the debris piles to separate out junk. This easily doubled the time and cost necessary to clean that lot.

After the debris had been reduced to rough wood chip mulch, city crews spread it around trees, flowerbeds and trails. Much of it was used by Highway Maintenance on new planting beds created the year before along both Interstates 75 and 71. Some chips were used by Forestry’s landscape contractors to mulch 3,000 newly planted street trees.

During the course of a normal year, Forestry’s contractors remove approximately 500 stumps. This storm added another 500 that Custom Stump Removal, Inc. gradually eliminated for $30 each. This contractor coordinated closely with Davey to grind the stumps as soon as possible after Davey completed the removals. The two companies worked very well together, keeping Forestry out of the middle.

From Forestry’s standpoint, everything had worked perfectly to this point. All the city agencies cooperated well with one another. The administration and elected officials provided support and did not interfere with daily work. Contractors performed a fantastic, safe job (no one was injured). Coordination with Cincinnati Gas and Electric Company, which had to restore wires and poles, was excellent.

Two items, however, did not proceed smoothly. Forestry requested $100,000 for replacement trees to be paid as part of the storm restoration cost. The request was not approved and the cost of replacements had to be found within normal budgets over the next few years. The second low point came when city “bean counters” would not pay Davey’s bill until what seemed like thousands of idiotic questions had been answered. They wanted the bill broken down not by hours worked per day per crew, but by how many hours were worked per street! After that was reconstructed, they wanted to know why more hours were spent on one street than another. Perhaps because one street had 100 trees and another had only one? It was fortunate that Davey did not delay as long in mobilizing crews as the city took to pay. Despite that one bad experience, Davey did not hesitate to mobilize multiple crews to resolve a $200,000 wind storm that hit Cincinnati in June 1993. For that one, they were paid promptly!

On a more positive note, we fondly remember some of the citizens who called with special requests. Some demanded instant service to remove small limbs that had fallen across their driveways. They simply did not want to hear that streets were blocked and trees were on houses, so Forestry staff played pickup sticks to satisfy the “screamers.”

At the other end of the spectrum, two
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City Highway and Sanitation crews worked on the ground and left working up in damaged trees to Davey personnel.

After the storm hit, a very calm lady called the Forestry office to report that a street tree had smashed her new minivan “flatter than a pancake!” She waited so long to call, she responded, “I knew you guys were busy. When it’s smashed, it’s smashed. I’ll have coffee and rolls ready for the boys.” And she did. Homemade!

Another caller was quite excited because a neighbor’s maple tree had fallen across the fence and flattened his garage. When Forestry suggested he call his own homeowner’s insurance company to see how they wanted him to proceed, he answered, “Wow, that’s a great idea. I’ll do that. Do you have their number?”

In your city

Drawing lessons from our experience, we suggest that people in your city who are expected to deal with storm emergencies, including the street section, call the local office of a large tree service that can supply multiple crews. Have a pre-emergency meeting to learn what services could be provided, the time frame for response and some estimate of the costs, just in case. Then, keep those lines of communication open. Your local electric utility company might help bring the city and various tree companies together, since they have disaster plans in place. To begin these planning meetings, we suggest you call the National Arborist Association at 1-800-733-2622 to ask what companies in your area could supply multiple crews.

Steve Sandfort is an urban forestry consultant in Cincinnati, Ohio and Thomas P. Webster is regional director with Davey Tree Expert Company.

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Measuring Employee Satisfaction

By Wayne Outlaw

How people feel determines their actions. Their level of satisfaction is directly related to retention. The actions of your employees determine the success and profits of your tree care company. By knowing employees' feelings and attitudes toward their work and career, management is able to make more informed decisions. The decisions and actions of managers are critical; they are the lifeblood of innovation and success, or the seeds of decay and decline.

If owners and managers don't know how their employees feel, they lack a vital element of the information needed to run the business. Leaders of many companies kid themselves into thinking they can understand the feelings of employees by simply looking or listening. While making that effort is important, it is simply not enough. Many times, disgruntled employees keep quiet. The absence of complaints, therefore, is not an indication of satisfaction within your company. Employees may not be candid because they want to keep their jobs and are afraid complaining may affect their future. They may voice their dissatisfaction quietly among themselves, or by their departure from the company.

In addition to being receptive to employees who approach you to share concerns—and taking the opportunity to ask them questions when possible—there are two more direct, more formal, and more effective approaches that provide significant dividends. These approaches are Executive Interviews and Employee Surveys.

Many people may feel these strategies can only be used by large corporations. However, they work very well in smaller organizations and may be needed even more than in larger ones.

An Executive Interview program provides a scheduled opportunity for you to ask questions and collect information while assuring employees that they have the opportunity to candidly and openly express their feelings and concerns on a regular basis. When employees know that a specific amount of time has been set aside by the business owner or manager to address their concerns, it can be very empowering and make employees feel important and valuable to the organization. These interviews are conducted with every employee on a regular basis, usually once a year. Executive Interviews are not designed to allow employees to circumvent the chain of command, but only to ensure an open flow of communication.

Employees should be informed, in advance, that the Executive Interview is totally confidential. They should also be aware that not every concern raised will be resolved nor will every request be honored. But they can be assured you will be attentive to their concerns and requests and will respond to them. (It is often best to take the time to research the situation and get all the facts before providing an instant response.)

Be sure to take the time to follow-up on any concerns or issues and inform the employee of the actions taken. The time it takes to conduct an Executive Interview and follow up will pay dividends in identifying issues and resolving them. It will also measurably increase employee satisfaction.

Executive Interviews are normally scheduled well in advance so employees have time to prepare. Usually 30 to 45 minutes in length, they are generally held in a location where the conversation will not be overheard, often outside the place of work, to encourage employees to speak more freely.

Sample Employee Survey

You can instruct your employees to answer Strongly Agree, Agree, Disagree, or Strongly Disagree to the following statements:

- I receive excellent support from upper and middle management.
- I clearly understand our company's policies and guidelines.
- Communication is open and honest.
- Decisions made by middle and upper management have my best interests at heart.
- I am rewarded fairly for my performance.
- There are enough contests, promotions and awards to keep me motivated to do an excellent job.
- My boss insists on high performance.
- My boss assists in setting goals and achieving them.
- My boss sets a positive example.
- Employees stop what they are doing and courteously greet customers immediately.
- I feel am highly paid in comparison to similar jobs in similar companies.
Executive Interview Format

1. Thank the employee for his or her contribution to the company and reaffirm that the individual is critical to the company’s future success.
2. Explain that job satisfaction is important and that the company does not want an employee to have a concern or problem that is not addressed.
3. Explain that the Executive Interview is not a performance appraisal session.
4. Take the lead and ask questions to get the employee to speak freely.
5. Discuss the employee’s satisfaction with the company, job, management, and the work environment.
6. Ask about relationships with coworkers.
7. Probe to determine if the employee’s manager is supportive.
8. Create specific questions to address any suspected areas of concern.
9. Allow plenty of time for the employee to express his or her concerns.
10. Clarify any information that requires follow-up and action.
11. Express appreciation for the employee’s time and attention.
12. Follow up on any issues or concerns.
13. Relay information (with employee’s approval) to employee’s supervisor.
14. Communicate results of any actions to the employee to show commitment.

In addition to the identification of perceived issues or problems of individuals, organizations may want to measure satisfaction of the entire organization, of various positions, or even by location. They may also want to tap the great ideas or innovations employees have to increase the organization’s results and profits. An excellent way to accomplish this is to use an Employee Survey.

There are many benefits of assessing attitudes with an Employee Survey. A periodic survey assesses key levels of satisfaction in specific areas and helps to monitor trends, confirm questions or suspicions, and solicit suggestions for improvement. Many times, company owners are surprised at the benefits, especially those implementing a survey for the first time.

If a survey is conducted by an impartial outside party, information can be obtained that is normally not available to upper management. The results of these private surveys may confirm in black and white what owners and managers have suspected, or may identify something that is a complete surprise. Once the information is quantified, it can be the catalyst to spur much-needed action.

No company is immune to the consequences of unknown problems with employees. It is important to recognize that these problems will not go away even if they are ignored. Unresolved problems or concerns will have an effect on an organization.

The type of information available from Employee Surveys is diverse. Areas typically addressed are employees’ feelings about the company, job, boss, and upper management. In these areas, topics such as goal clarity, planning, measurement, accountability, recognition, communications, human relations, perception of the company, perception of the industry, management effectiveness, and business effectiveness can be probed.

Employee Surveys vary in complexity, ranging from a simple questionnaire to an in-depth study. You may conduct your own survey, but you may need an outside party to design and implement it to ensure confidentiality and objectivity. This type of survey typically follows these steps:

- Identify the objective
- Create the survey instrument
- Select the group
- Administer the survey
- Tabulate and analyze
- Develop recommendations
- Develop an action plan
- Provide feedback

My experience in conducting Employee Surveys has shown me that they spot problems, but the key to their success is confidentiality. Employees must know their responses will be kept confidential in order to candidly express their true feelings—the feelings that motivate their actions in the field.

Some companies distribute short surveys in pay envelopes or other employee communications. Others prefer a more detailed, long-term approach by having an organized, formal survey administered periodically. The timing and format of your survey will give you answers that pinpoint both strong and weak areas and help you plan changes to improve employee retention.

It is essential that management stay in tune to the feelings and needs of employees. The more in touch they are and the quicker they respond, the more satisfied employees will be. In today's very tight labor market, very satisfied employees are the human capital needed for a company, small or large, to succeed.

Wayne Outlaw, author of SMART STAFFING, will be the keynote speaker at TCI EXPO '99 in Indianapolis, Ind., Nov. 4, 1999. He will give two talks, one on recruitment and the other on employee retention. For more information, see the TCI EXPO registration brochure in the center of this magazine. Outlaw can be reached at (800) 347-9361 or www.smartstaffing.net.

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Fairmont has designed the new HFC30 Hydraulic Flow Control Valve with a low profile and lightweight aluminum body that can be added to any hydraulic system used to power equipment and tools and helps eliminate the need for a separate hydraulic unit. It accepts up to a 30-gpm input, enabling operation off most skid-steers, tractors and loaders. It attaches easily to the equipment’s hydraulic accessory circuit, because all ports have an O-ring boss that accepts a variety of standard couplers, including the popular HTMA styles. The Fairmont Flow Control Valve comes with an adjustable flow, 10-position valve that allows the user to match hydraulic flow to the requirements of the tool’s operation and an integral pressure-relief valve helps ensure that the hydraulic tools in use won’t be damaged if the equipment has excessive pressure. For information contact: Greenlee Textron, 4455 Boeing Drive, Rockford, Illinois 61109-2988. Phone: (815) 397-7070. Fax: (815) 397-1865. Web: http://www.greenlee.textron.com

RedMax designed a new style gearbox into the HT2200 single-sided, hedge trimmer and reduced the cost over previous models. The HT 2200 is equipped with a 24-inch, single-sided, double-reciprocating blade that operates at a speed of 3.83 feet per second, and is powered by RedMax’s Pro G-23L 22.4 cc two-cycle engine. Handles are ergonomically located on the engine side of the blade and the back of the engine. The handle placement requires two-hand operation, and reduces operator fatigue during long hours of operation. For information on the complete line of products by RedMax, a division of Komatsu Zenoah America Inc., write to 1505 Pavilion Place, Suite A, Norcross, GA 30093. Phone: 300-291-8251, extension 14; Fax: 770-381-5150.

Growth Products announces Companion was granted an Environmental Use Permit (EUP) by the EPA for use as a biofungicide in greenhouse, nursery and turf applications. Companion, a liquid biological, provides growers a viable alternative to chemical fungicides. Growth Products developed a delivery system for the active microbial ingredient in Companion, Bacillus subtilis GB03, and the ability to keep the microbes alive for an indefinite period of time (24+ months). Companion has undergone three years of university trials and field tests with plant pathologists. Companion creates an environment teeming with beneficial microbes which crowd out harmful disease-causing pathogens and establish a mutually beneficial relationship with the plant by attaching themselves to root hairs, producing hormones that stimulate root growth and mass. It can be used for seed germination, and its smooth texture allows it to be used with sophisticated irrigation systems. For information call 800-648-7626. Fax: 914-428-2780. E-mail: info@growthproducts.com Web: www.growthproducts.com

Excel Hustler introduced a tractor-mounted Edger to the ShortCut line of ultra compact riding mowers. It allows the operator to edge along sidewalks and curbs from either the grass side or the hard-surface side. The ground-driven blade is not powered thus eliminating the risk of thrown objects striking a bystander or property. Add the BAC-VAC catcher and edged materials can be vacuumed up for an immaculate finish. Featuring Hustler’s patent-pending H-Bar Steering and a body length of 59 inches, the ShortCut is the shortest riding mower on the market today, making maneuverability in tight mowing conditions a snap. It is possible to edge as fast as the tractor can drive and it can be operated from a seated or standing position. The ShortCut is available with 25, 22, 20, 17, and 14 hp engines, Hydrogear Pumps and Ross wheel motors with deck options of 60, 54, 48 and 40 inches. It has top-of-the-line components and heavy-duty construction that has made the Hustler name famous. For information contact Excel Industries, Inc. at PO Box 7000, Hesston, KS 67062. Phone: (800) 395-4757; Web: www.excelhustler.com
A shock-absorbing shovel that prevents injury during heavy forceful tasks has been introduced by Kelemen's Kreations. Rebound absorbs the shock that would be transferred to the user’s wrist, elbow and shoulder joints during repetitive movement. Utilizing a patent-pending rubber disc design in the handle, Rebound cushions the heavy contact allowing the user to continue a long day’s work injury-free. The handle may be used interchangeably with a variety of hand tools. For information call Mike Kelemen, Kelemen’s Kreations, RR1, Site 16 Comp 69, Vanderhoof, B.C., Canada, V0J 3A0. Phone (250) 567-1033; Fax (250) 441-0035.

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Morbark introduced N-Viro Mulch 2000 Portable Coloring System, a completely portable and self-contained unit that transforms low-value wood waste into high value premium landscape mulch. N-Viro Mulch 2000 produces mulch in a variety of colors at rates in excess of 250 yards per hour with wood flow and colorant automatically metered. The system employs a patented process using organic dyes to transform recycled shredded wood waste into decorative landscape mulch that resists fading, providing a consistently fresh appearance. Powered with an 80-hp diesel, the unit is equipped with three feed augers and two mixing augers. Colorant is injected through 12 replaceable nozzles for thorough product coloring. An anti-plugging system prevents jamming and a hydraulic folding discharge conveyor makes it portable. For information and video, contact Morbark at (800) 233-6065.

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Waco Truck Mounting Operation

TIME Manufacturing Co. and TIME CONDOR Corp., manufacturers of aerial lifts, aerial work platforms and digger derricks, announce the opening of a third manufacturing facility in Waco, Texas.

The Versalift product-line includes truck mounted aerial lifts, ranging from 29 feet to 65 feet. The CONDOR product-line includes truck mounted aerial work platforms, ranging from 90 feet to 210 feet and self-propelled telescopic and articulated booms as well as scissor lifts.

The new truck mounting facility will combine the installation of the VERSALIFT booms onto the truck chassis and the assembly and manufacturing of the truck-mounted CONDOR products. All three facilities combined employ about 500 employees and occupy over 430,000 square feet.

New Morbark Facility

Morbark, Inc. announces the opening of the latest in a series of full service Product Support Facilities designed to bring parts, service and sales support closer to its customers. The new facility, located in Ashland, Va., in the Richmond area, will stock a full inventory of commonly requested parts for Morbark equipment as well as housing service and repair capabilities.

The Richmond facility opened July 19, 1999. For more information, call 804-550-9196.

MTI Wins Contract

In February, MTI Product Support was awarded a three-year contract with U.S. WEST for the inspection of its approximately 1,800 aerial lifts. “This new contract will increase the division’s workload by 20 percent and will generate more than 2,000 additional invoices annually,” says Carl Womble, national service manager. “We’ve had to provide the stock vehicles to meet demand and double our number of field service technicians in the region.”

Each technician has been equipped with a service vehicle, tools, parts and supplies, including a laptop computer for uploading work orders to the main network. Eventually MTI service technicians will be able to email inspections and reports. By the end of the calendar year, the team will have performed its annual inspections on all lifts in the fleet that covers 14 states.

Mid-Am Speakers

The Mid-America Horticultural Trade Show (Mid-Am) announced a partial speaker list for its conference.

Dr. Leonard Perry from the University of Vermont will discuss Web site creation, conducting successful searches, and other electronic experiences.

Lynn Cohen, who oversees the perennial department of a nursery that seeks out the newest perennials from around the world, will discuss perennial marketing and merchandising programs.

Stephanie Cohen, garden writer, designer and instructor, will present her observations about the newest perennials.

Wolfgang Oehme, a landscape architect and horticulturist, will discuss grasses for all seasons, grasses with perennials, grass maintenance and meadows.

Consultant Clifford A. Kraft will present his experiences with increasing bottom-line profits, employee growth, customer satisfaction and developing a company that allows owners and employees to achieve personal goals through the company.

The Mid-Am Trade Show will be held January 19-21, at Navy Pier in Chicago in 2000. For information contact: 847-526-2010; fax: 847-526-3993; e-mail: mail@midam.org; Web site: www.midam.org.
"Chainsaw Safety"

By: Jeffrey Lee, Branch Management, Riverside, CA (909) 276-8060
Branch Management—specializing in educational programs and training for the tree care professional

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

At 165 chiseled pounds, tanned Max Bunyan was the picture of masculine perfection as he worked his way gracefully through the towering tree in the Widow Carter’s yard. Feeling the pressure of Big Al Fontaine’s demands to get this job done quickly, Max barked orders to the groundman in uncharacteristic fashion. “Git under the tree and clean up while I trim.” “That ought to speed things up a bit,” he snickered to himself.

Like Max, the groundman was a seasoned veteran. Over the years, he’d seen his share of disasters and foul-ups, and it was with no small degree of trepidation that he weighed the wisdom of Max’s direction. “Oh well,” he thought, “it beats the unemployment line.” Cleverly, the groundman timed his trips beneath the tree in perfect synchronicity with the sound of the saw starting and stopping. As he worked beneath the tree, brush swooshed to the ground around him, narrowly missing him every time.

In the treetop, Max’s mind was a vacant chamber as he completed cut after cut with surgical precision, shutting the saw off at intervals with just one hand, and swinging the 20-pound beast to the side of his belt. This time, however, the saw did not snap submissively into its customary position on Max’s belt. This time, something went wrong.

As he released the handle, Max felt the chainsaw leave his hands and take on a life of its own, soaring and banking away from him like a vicious bird of prey. Max’s whole body puckered! Nothing but instinct, reflex and plain darn luck prevented the saw from plunging downward. Desperately, Max made another grab, and somehow captured the dancing chainsaw with two bare hands but, who ever thought the muffler would be so darned hot! AAAAAhh! Max wrestled the monster to his chest and tied it off with his climbing line - without even a word to the groundman.

The job completed, Max descended to the ground where the groundman confided that he’d felt safe working under the tree, even during the cutting operation, because he knew that Max’s saw was tied off with a lanyard. [ANSI Z133.1.6.2.2: Power saws weighing more than 15 pounds (6.8 kg) (service weight) that are used in trees shall be supported by a separate line, except when used from an aerial-lift device.]

“What are you talking about?” Max laughed stupidly. “I don’t even own a chainsaw lanyard.” A tense silence passed between the two men, while the groundman fantasized again about that unemployment line.

Remember folks - safety is EVERYONE’S responsibility. [ANSI Z133.1.8.7.7: When a chain saw operator and one or more other arborists are working on a tree, each should be aware of the other’s locations and activities.]

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For the Next Millennium—All Of Your Arborist Needs

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What if we had listened to our grandmother years ago when she told us to save 10 percent of every paycheck we earned? What if we had invested that money in growth stocks? What if, after analyzing who we were, where we were going and how we were going to get there, we had been able to see clearly how to "position" ourselves in the world. Business planning, or, better yet, personal planning, is absolutely essential for anyone who wants to do more than survive in the tree care industry. Anyone who has lived long enough to make some bad choices in life will testify to that fact. To help make the planning process easier, I will break it into smaller parts and take some of the confusion out of it.

Business success happens in three steps.

**Step 1:** You get the work, which is derived from sales.

**Step 2:** You do the work, which can be defined in tree care as production.

**Step 3:** You control the outcomes all along the way, which is management.
Planning helps us visualize the outcome in advance. It is impossible to predict everything that may happen in life, but with a plan we have a much better chance of achieving our desired results. Whatever we do in our business plan, we do to ourselves. High-profit, high-growth, business people do plenty of homework to excel at what they do. Don’t expect miracles if you aren’t willing to do the planning work.

A business plan is commonly thought of as a plan for the future, a set of circumstances that will get us from point A to point B. A plan asks questions about who we are, what we want, where we are going, and how we will get there. The business plan is the means to our personal ends, a combination of business and personal goals that are funded with business profits. How well we do our planning is going to dictate everything that happens to us for the rest of our lives, at least from a financial point of view. If you know what you’re doing right, plan to do more of it. And if you know what you’re doing wrong, do it less. Business plans are not plans to change the past, but a means to examine and learn from experience. After a thorough analysis, it will be possible to use what you learn to plan for the future.

A lot of people think that business planning is about numbers, spreadsheets and budgets. That’s part of the process, but merely the end result of a lot of soul searching. The real benefit of planning is to uncover those aspects of your tree care business you need to learn more about.

A financial statement mesmerizes too many arborists. They only look at sales figures, when they need to look beyond sales. Don’t consider numbers as mere figures; convert them into physical events. What were the characteristics of each sale? Who were the customers? What did you do to make those sales? How many contracts were bid at the correct price? On how many jobs did you lose money? How can you eliminate the jobs that lose and concentrate on jobs that produce profits? When you look at payroll, think of it in terms of effort: blood, sweat and tears ... climbing in trees ... working in ice storms.

Financial statements reflect everything that went on in your business. Convert the numbers so you can compare them with a concrete set of standards. Analyze the cause and effect of profits from each type of job, compare the numbers to industry averages, decide if you are happy with the results, then go forward from there.

You don’t have time to think about your financial statement on a daily basis. This is why, once a year, you need to get a good financial statement drawn up and a tax return. Use your financial statement to help you see your business as it really is—even if you don’t make any changes. If you can look at your financial statement and answer the necessary questions, you will definitely see a change in your level of profits.

Over 70 percent of new businesses in the United States fail within the first three years. The major reason is lack of planning. Arborists know how to work and care for trees, but they don’t always think hard enough about pricing strategy or competitive factors. Business management isn’t doing the work; it’s knowing what you’re doing; it’s the brainwork that needs to be done be-
fore you drive out of the shop.

Another startling piece of information: 80 percent of the retired people in this country have incomes below $10,000 per year. Imagine working all your life, and ending up living on less than $10,000 a year. People don’t save for the future. The savings rate in the United States is under 5 percent. If you’re looking for financial freedom, you need to plan. Most people spend more time planning who is on their Christmas list than planning their financial lives. Let me stress once again: the reason businesses fail is because owners do not plan.

1. Getting the work

You may be selling a service where there are so many providers you will only reach a certain amount of sales in that particular market and that is it. Is there a market and is it big enough for you and your competition? If you get your share of the market, is that going to be enough to make a living? If not, what are your options? This is what analyzing service and product offerings is all about.

The competitive environment is very important. Who are you up against in your area? How do your prices compare? What kind of service are you offering your customers? How do you separate yourself from the competition? Is there anything that you can do to get an edge on the competition? If you were to charge less, would that give you a market advantage or just lower your profits? If you were to charge more, would you work less (which puts less stress on your machinery) and make just as much money?

Look at the sales figures on your financial statement, and ask yourself how you earned those sales. What was your selling technique? Was it referrals, the introduction of a brochure, a telemarketing campaign, or ads in the local newspaper? If you can answer the
question of how you got the sale, then do you can spend your money and focus your attention appropriately.

Your financial statement tells you that you spent an additional $5,000 on advertising and promotion. Relate that to sales figures and ask yourself if spending that amount of money did any good. What were sales the year before without spending $5,000? Divide advertising by sales figures to find out the ratio for your sales to advertising for every new thousand dollars of work that comes into your business. Compare the costs to last year’s figures with an eye toward eliminating expenses. I’d rather eliminate expenses than increase sales. If you increase sales by $1000, but it costs $600 in materials and labor, you have a gross profit of only $400. If you can eliminate $1000 in an expense category, it goes directly to the bottom line. You have to take your financial statement numbers and convert them into concrete questions and answers. The numbers don’t mean anything until you start relating them to the successes and failures they represent.

One way to implement a pricing strategy is to keep tabs on your competition. Look at the companies that consistently underbid you and put them in perspective. If you were to bid on a job again just to get the business, would you price it the same as the competition? The low bidders may be ignorant as to the actual costs of doing business, they may be cutting corners on safety, or they may be doing some things better than you. Understand your competition.

I’m an advocate of mergers. I think there should only be one tree care company in the United States — call it the United States Tree Care Company. Standardization would be effortless. Pricing strategies would be easy. Insurance costs would be next to nothing compared to what companies pay individually. Bigger can be better, especially if you merge with a firm that encourages you to continue running your own business. Leaving aside a large national firm, you may want to consider merging with a local competitor. You can get price advantages through reduced costs realized in a merger. Look around at the companies in your area and ask if you would be better off joining forces, getting bigger and stronger, maybe even to the point of controlling markets. It is something to consider every year when you look at your financial statement.

How do you go about getting the work? Is there an easier way? What does it cost to draw up a contract? Have you stopped bidding on small jobs because they have high costs and low profits? That is a consideration on your contracting proposals.

One of the fastest and easiest ways to grow a business is through superior customer service, which promotes retention. Are you losing customers? Are you no longer getting customer referrals? Ask yourself these questions. The answer,
which should become part of your business plan, will tell you where to focus your energy and attention.

2. Producing the work

It is one thing to earn the work, know what you’re doing, price it right and come up with the correct advertising strategy ... but doing the work is a whole different set of challenges. Performing tree work is getting very difficult because of the difficulty finding good employees. Fortunately, a lot of people immigrate to this country and this helps the entire industry. In the United States, 40 percent of all new workers are going to come from the African-American, Hispanic and immigrant communities. If you haven’t started to concentrate on recruiting in these sectors of the labor market, you are missing a dynamic segment of the workforce.

An alternative to hiring more employees is to take on less work by raising prices. I know landscapers on the East Coast who have raised prices 30 percent and are still winning bids. Surveys indicate that in 1997 there was a 15 percent to 20 percent growth of the green industry. There is little resistance to higher prices because people can’t find anyone to do the job. Before you give someone a price, sleep on it.

If you are looking to increase sales or take on more people, take a look at your plant & facility. Instead of paying a landlord, can you get an option on purchasing your building instead of pouring money into rent? With a purchase, you’ll have a salable asset later in life. A sound business plan helps you answer these questions as you consider options.

What is your method for acquiring equipment? Do you finance new equipment? Lease used equipment? Take a look at repair bills (and downtime) on old equipment, and your costs will tell you when you should scrap an old lift. Always consider whether the repairs are worth maintaining the equipment.

Think like an accountant when you go through your business plan. I have devised business plans where I have seen owners who have wasted $10,000 per year for 10 years. That is $100,000 wasted because someone did not take the trouble to investigate expenses. Money doubles in less than 12 years—even if you keep it in a low-interest bank account. It could be worth millions 10 to 15 years down the line when properly invested.

Where do your personnel come from? Have you found your best workers through referrals? Is this something you need to encourage with employee incentives? Do you track your Help Wanted advertising, or are you buying ads in every publication you can think of? Do you need to learn to speak Spanish to assist in employee retention, or do you expect all of your employees to learn English? You need to track this information so you can make it part of your business plan.

You have to quantify your operating methods, so you can determine whether you are doing the work in the most productive way. Have you ever timed jobs? If you had better equipment, would you increase productivity? The biggest expense for service businesses is payroll costs, so you need to use your labor wisely. You also need to know that your workers are working and not finishing at 3:00 and parking on the side of the road until 5:00. If you know how long your jobs should take, your employees can’t take advantage — and you can price them properly. If you are unaware of what crews should be producing, you can’t be sure you are using the most effective production methods.

While quality control is important, beware of employees who overwork jobs. Some people are perfectionists and you need to stop them, especially in pruning operations. You can spend hours on fine pruning, but you need to let your employees know when to stop. Don’t introduce more costs, because you’re going to decrease profits.

You’re selling time in your business, whether you’re working by the hour or on a fixed job. You should know how long it takes to do the work and price it accordingly. If you are interested in growing a business and you’re going to have more employees, you have to have some form of work measurement. You have to assign work, track it, price it and bill it.

You should know what your costs are, because you should know how long a job will take. Every expense will be on your Profit & Loss (P&L) statement, and all of those expenses should be related to time. Take the figures from your P&L to find out how many hours the company spent doing each type of work: pruning, fertilizing, removals, stump grinding. Take all those figures (for each category) and divide them into your sales number per category to see what, on average, you produced per hour. Then compare your produced-per-hour figure with the price you bid on each job. If you have estimated that a job should take five hours and it usually takes four, you can adjust your bids and your schedules accordingly. This method also gives you a way to measure individual crew productivity.

In service businesses, you’re selling time. When you have a crew in the field pruning or taking down trees, you are selling time. Keep track of how much time costs, and what time can be sold for in the general marketplace. Picture a company that sells 10,000 man-hours of labor a year. If the prices charged clients had been a dollar per hour higher, the company would have earned $10,000 more that year. Do you have costing methods in place to price out every job you’ve ever done? Start now, and enter that information into your computer. You can run charts on jobs bid, jobs won,
jobs completed and completion time. Or you can compare the bid price to the actual price to see how close your bid was. I used to estimate within 2 percent to 5 percent annually. I knew my job costs and I knew my time. The efficiency was evident.

3. Management plan

When do we find the time to manage? If you do it at the end of the year, when the season ends and you have your 12-month P&L from the accountant, you can really analyze it and save yourself money from consulting fees. Where is your business direction? If sales and profits have been declining in your market and you have a saturation of competitors, you need to ask yourself if your business is going to pull through. Ask yourself if you expect to be in this business three, four or even 10 years from now? How are you going to keep yourself in this business? Ten years from now, you still have to eat. As your family grows, kids go to college and you’re going to want to take it a little easier. You don’t want to make money the hard way all your life. If you own a small company, you won’t be able to do the physical work yourself forever. Work with your head instead of your hands.

The ultimate goal of a business plan is working toward the best financial outcome. At the end of 40 years of hard, honest work, you will want to have something to show for your efforts. The best way to get ahead is for your money to make money, not by working for everything you have. You work to get to the point where you have excess funds that you can invest.

We covered the importance of accounting and taxation as part of your financial statement. You should have a full-blown financial statement from a CPA. Working with a CPA is a good idea if your goal is to grow the business. In order to expand rapidly, you will need financing to invest in your business, which means keeping sound financial records. Spend the money on a CPA firm. Don’t be afraid to spend $2,000 or $3,000 at the end of the year to go to the best CPA firm you can find. They have connections that will help you grow your business, because their customers and their clients own office buildings, condominiums, and fancy houses. It all goes around in one big circle.

The final piece of a sound business plan is a contingency plan, which says that if all else fails, this is what I’ll do. It’s a good idea to have a strategy for the worst case, as well as the best outcome.

That is business planning in three easy steps. Is it really easy to do? No. The true benefit of planning is to uncover those aspects and facets of your business where you need to learn more. In that context, business planning is easier than failing financially because you didn’t plan at all.

Phil Nilsson is a consultant, speaker and author. This article was excerpted and adapted from a presentation at TCI EXPO '98. For more information, contact Nilsson Associates at (860) 621-6199.

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Power Pruning Pointers

By Richard C. Howland Jr.

Power pruning equipment is as varied as the arborists that use it in the field. According to users we spoke with, the power source they select for pruning has more to do with personal preference than efficacy. Everyone seems to have definitive and different reasons to give serious consideration to one power source over another, especially when it comes to power pruning on a large scale.

The most important reason cited by a number of operators is safety, especially in high places. Another oft-mentioned consideration is the work environment. Then there's the issue of which type of tool works best. For example, are you pruning at an orchard or estate, near a utility line or around obstacles like buildings or towers? Will the choice be a lopper or a circular or bar-type chain saw?

Scott Hermann, technical manager for TOL Inc.'s line of ADI hydraulic pruning tools, maintains that the issues to consider in tool selection include: cutting capacity; quality of cut; durability of the tool; ease of servicing; operator comfort and safety; center of gravity; ease of tool head change as appropriate (i.e. chain to circular saw); and adaptability to power sources.

Manual devices such as loppers and saws do well for small branches, typically under an inch in diameter, and are most effective for fine pruning jobs when the arborist is standing on the ground. However, as the job gets more complicated, “at altitude” in a bucket, power sources like low-pressure, hydraulic-powered pruners and loppers begin to curry favor. According to one product manager that, admittedly, specializes in hydraulics, battery-powered units don’t have the power yet to “make the big cuts.” He also insists electric-powered pruners are dangerous because of the cutting blade's proximity to the power supply cable.

Gas-powered units are generally lighter and less cumbersome because they aren’t tethered to oil lines and provide quick, powerful cuts in hard-to-reach places. That makes gas power attractive for low level or ground-work, but for some, gasoline poses problems aloft. Arborists we spoke with are concerned with vibration and fatigue, but also about working with gasoline in a confined area like a bucket because, in the event of a fire, “one cannot escape quickly enough.” The same arborists, though, will admit to leaning out of a bucket or off a strap with a chain saw to effect a pruning cut, even at heights best suited to a pole-type pruner. So again, it boils down to what the operator is comfortable with.

Low-pressure, hydraulic-powered devices are quite popular because they are exceptionally powerful, consistent, and durable over time. They can also be plugged quickly into an available truck-mounted hydraulic tool circuit (or remote generating unit) capable of putting out up to 2,000 psi at about ten gallons per minute. Further, they are quieter and
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nearly free of vibration. With tools and accessories operating at 1,000 to 2,000 psi, operators are assured of sufficient and consistent cutting power. That kind of power is sufficient to make very clean and often very fast cuts or lops on larger branches. (High-pressure hydraulics can create too much power and can be problematic in maintaining the integrity of the circuit, especially at the connections. Even needle-sized leaks can create puncture wounds to human flesh!)

In a distantly related application, Greenlee Fairmont, a leading maker of pruners and loppers, offers a line of pneumatic orchard pruners running off a three to five cfm air flow at pressures of 125 to 140 psi and offering large hook and blade capacity up to an inch and a half. This line is not intended for use near high-voltage lines because of the aircraft alloy and aluminum extension shaft construction.

For the purpose of this article, we will focus on the features and benefits of pole-type power pruners, with only limited discussion of loppers, chain and blade devices.

Loppers have mechanical jaw-type designs that are available as standard anvil type, bypass, and grasp type blades. In the first two applications, one blade remains stationary while the cutting blade advances. The latter allows both blades to advance toward one another.

According to Bob Poirier, product manager for FCI's line of Racine-brand hydraulic tools, "The selection of lopper, chain or blade type pruners is usually a matter of personal preference and often boils down to which type an arborist was trained to use."

Even among "blade users" there's a preference between using straight blades and right-angle blades, depending on where one wants cutting debris directed. "Some don't like the circular saw because of its tendency to give a dangerous kickback in some applications. It's a tradeoff. The circular blade offers speed and capacity, but when it hits a limb, the movement might throw the pole unit out of the operator's hand or even threaten to dislodge the operator from a bucket. Certain pole chain saws are less aggressive and produce little kickback," Poirier maintains.

For very small branches, up to one inch and smaller, the power lopper with a guillotine action is extremely fast (faster than manually operated). The pull of a trigger will produce a rapid blade cutting action. Though some think hydraulic loppers are slow, cumbersome and tiring for the operator, in fact the lopping action is almost as fast as the blink of an eye.

The power pole chain pruner, often referred to as a "chain-saw-on-a-stick" has proven extremely popular because of its versatility, stability at the cutting teeth and low profile, making it easy to probe into confined areas. Chain bars are typically purchased between eight- and 13-inch lengths.

Circular saws are intended for high work, not ground work, and they bring the same kind of power to the work as the chain saw type. Most manufacturers offer an angled head design to throw debris away from the work and the operator. However, the diameter of the blade limits the cut to just under a third of that of the chain bar type.

Lengths are as varied as the user's need, from the pistol-grip type 12-inch hydraulic chain saw to units with extensions running over seven feet. Standard purchases run about 48 inches, with
Seven Golden Rules for Selecting Power Pruning Tools & Accessories

What to look for in a power pruner...

1. **Power source**
   Hydraulic, pneumatic, gasoline, manual. Consider equipment already on hand and how you can take advantage of it. Is your rolling stock equipped with a hydraulic tool circuit? Compressor? How much high work do you do? (See length.)

2. **Cutting needs**
   Open center versus closed center. Capacity. For lopper types, how much work do you typically do under two inches in diameter versus larger that can also be accommodated by a chain or blade unit?

3. **Weight**
   Consider the overall weight of the pruner lopper and the amount of time you spend using such units. Do you need a metal or fiberglass unit?

4. **Agility**
   Will tethered systems like hydraulic or pneumatic interfere with the type of work you normally do. What about adjustable poles and swivel-action heads?

5. **Length**
   Consider the overall length of the tool as well as the pole/extension specifications and interchangeability.

6. **Accessories**
   What can be added by the original equipment manufacturer or after-market suppliers, like hedge-type trimmer heads to add value to your pruner tool chest?

7. **Safety**
   Don’t push the tool. Buy and use equipment according to need. Do you need heat-insulated handles on hydraulic units? Are metal handles good enough or will you be working near power lines and require dielectrically safe tools?

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Richard C. Howland Jr. is a freelance writer in Bedford, Mass.
Deep in the basement of the Bureau of Labor Statistics in Washington, a summit meeting, of sorts, was held on Aug 10-11, 1999. Representatives from the tree care industry, OSHA and others with a stake in arborist safety engaged in two days of dialogue and compromise at a stakeholders’ meeting called by OSHA to examine worker safety in our industry.

It would appear that everybody won. It may be premature to declare that loudly, but not absurd to hope for it.

Those who follow this column know that the National Arborist Association for the past two years has actively sought relief for its members from regulation under OSHA’s Logging Standard. We now have their ear. OSHA’s Directorate of Compliance Programs, the folks in charge of enforcing OSHA standards, are seeking to understand our industry, and from that deeper understanding, to regulate it more appropriately.

One of Federal OSHA’s immediate and overriding concerns is an unacceptably high number of fatalities in three areas: “struck-by” accidents, falls from heights and electrocutions.

OSHA hoped for two outcomes from the stakeholders’ meeting. They wanted to come up with more appropriate guidelines with which to enforce safe work practices in the industry without having to write a new standard. They also sought the appropriate educational information for (as well as the means with which) to reach a broader cross-section of the industry.

On the point of compliance, industry had one very clear and firm message: The ANSI Z133 Standard has to be the means by which OSHA interprets and applies enforcement. The “Z” has guided industry safe work practices for 30 years. It is written by industry experts in a consensus process, and it keeps pace with rapidly evolving tools and practices in the industry.

In some ways, the outreach question was more problematic. Again, Z133 formed the basis for the information that industry leaders felt the industry needed. The problem was, and is, delivery. An analysis of OSHA’s statistics reveal that over 75 percent of the fatalities occurring in SIC 0783 were experienced by companies who weren’t members of NAA.

What exactly does that tell us? Do members have better access to information, and does that help them work more safely? Have companies that bother to join regional or national associations already made a stronger commitment to worker safety? Both are probably true to an extent.

Based on the first theory, that “knowledge is power,” the stakeholder group discussed various means of disseminating information—such as OSHA’s web site, “point-of-sale” distribution of information through vendors serving arborists, and broadened—perhaps even government subsidized—mail distribution of training and education materials.

In the opinion of NAA’s leadership, the ball is now in OSHA’s court. The industry needs to see how they will follow through on the strong recommendation of turning to ANSI for compliance interpretation.

The ANSI Committee has its work cut out as well. OSHA raised valid concerns about the consensus standard. The Z133 is in revision, and its committee made over 90 changes to the draft document since its April meeting. It will have to entertain even more revision if it is to strengthen and clarify its language to address OSHA’s concerns.

The industry is at a pivotal point in addressing worker safety and OSHA compliance. Change has a faster pace. You should be attuned to, and involved with, that change.

The ANSI Z133 Standard can be purchased by calling 1-800-733-2622.

Peter Gerstenberger is director of business management, safety & education for the National Arborist Association.
Fall Career Options Await Students

The 4th annual NAA Student Career Days at TCI EXPO '99. This event is held in conjunction with TCI EXPO, Nov. 4-6, 1999 at the Indianapolis Convention Center/RCA Dome in Indianapolis, Indiana.

Tree care companies looking for employees can exhibit at the Job and Internship Fair on Friday, Nov. 5, from 11:00 a.m. to 3:00 p.m., or participate in other Career Days activities such as the Student Career Days Tree Care Skills Competition. Call Chris Brown toll-free at 800-733-2622 to register and learn more about this great opportunity to impact the future of arboriculture.

Students and student advisors, call Bob Rouse at 800-733-2622 or e-mail Rouse@natlarb.com to find out how students and advisors can attend this fun and educational event.

The 4th Annual Student Society of Arboriculture Conference and Job Fair is Sept. 24-27, 1999 in Stevens Point, Wisc. The event features a Job Fair, ArborMaster Skills Competition, North American finals, and Field Day. Contact Tim Walsh at 715-346-4211 or e-mail: twalsh@uwsp.edu if you are interested in sponsorship opportunities, exhibiting, or attending this event.

Future Farmers of America will hold its 72nd National Convention in Louisville, Ky., on Oct. 27-30, 1999. Entitled "Lighting Up Louisville," approximately 40,000 high school students accompanied by 10,000 chaperones (parents, guidance counselors, teachers) attend this annual conference. Companies can exhibit in an informational careers expo. Companies are not allowed to recruit, but can promote the various types of careers available in arboriculture. It’s an opportunity to share your enthusiasm about your company, and whole the tree care industry! Advance the field of arboriculture by exhibiting at this event!

Students can talk to tree care company reps at TCI EXPO Job and Internship Fair.
Events & Seminars

September 13-15, 1999
American Society of Landscape Architects
Annual Meeting & Expo
Boston, MA
Contact: (202) 216-2336

September 14, 1999
Arboriculture in Oklahoma Workshop
Oklahoma State University
Stillwater, OK
Contact: Mike Schnelle (405) 744-7361

September 17, 1999
Western Chapter ISA
Regional Conference "Back to Basics"
Tucson, AZ
Contact: Dudley's Trees (520) 792-4669

September 17, 1999
California Arborists Assn.
CPR/Aerial Rescue Workshop
San Mateo, CA
Contact: (707) 254-8862

September 18, 1999
Exams for arborist and tree worker
Western Chapter ISA
Tucson, AZ
Contact: Dudley's Trees (520) 792-4669

September 20-22, 1999
Pacific Northwest Chapter - ISA
1999 Annual Conference
Contact: (503) 585-4285

September 22-24, 1999
1999 Texas Tree Conference
Dallas, Texas
Contact: (409) 845-2641

September 24, 1999
California Arborists Assn.
Climbing Skills Workshop
Davis, CA
Contact: (707) 254-8862

September 26 - 28, 1999
VR&PS Annual Conference/Tradeshow
Richmond, VA
Contact: (804) 730-9447 or (804) 783-7300

September 27 - 29, 1999
Trees, People & the Law
National Conference
Nebraska Arbor Day Foundation
Nebraska City, NE
Contact: (402) 474-5655

September 29 - October 2, 1999
ASCA 32nd Annual Conference
San Antonio, TX
Contact: (301) 947-0483

September 30, 1999
Nebraska Arborists Association
Tree-ID Workshop
Omaha, NE
Contact: (402) 476-3852

September 30, 1999 - December 16
Arborists' and Tree Workers' Certification Preparation Course
Orange County, CA
Contact: Ted Stamen (909) 656-3431

October 1, 1999
Trade Show & Field Day
Washington Association of Landscape Professionals
King County Fairgrounds
Enumclaw, WA
Contact: (800) 833-2186

October 6, 1999
Trade Show & Field Day
Washington Association of Landscape Professionals
Western Washington Fairgrounds
Puyallup, WA
Contact: (800) 833-2186

October 6-7, 1999
Ornamental Plant Materials Conference
Oklahoma State University
Stillwater, OK
Contact: Mike Schnelle (405) 744-7361

October 7, 1999
Electrical Hazards for Arborists Workshop
Michigan Forestry and Park Association
Energy Service Ctr, Saginaw, MI
Contact: Ann Ashby (517) 482-5530

October 7-8, 1999
Dr. Alex Shigo
Modern Arboriculture, by the Book
Portsmouth, NH
Contact: (603) 436-4804

October 8-9, 1999
ALCA Masters in Management
Sheraton Bradley International Airport
Windsor Locks (Hartford), CT
Contact: (703) 736-9666

November 4-6, 1999
TCI EXPO '99
Indiana Convention Center & RCA Dome
Indianapolis, Indiana
Contact: Carol Crossland (800) 733-2622

Send information on your event to:
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E-mail: Garvin@natlarb.com
The National Arborist Association (NAA) has been elected to the Associations Advance America Honor Roll, a national awards competition sponsored by the American Society of Association Executives.

The NAA received not one but two awards for its programs—Excellence in Arboriculture Awards and National Day of Service.

The Excellence in Arboriculture Awards program recognizes companies and their clients who have distinguished themselves with excellence as shown by their work and dedication. Past winners have earned long-term clients who are present at the awards ceremony to stand by these tree care companies. Clients earn worldwide recognition because they hired an NAA member company for their tree work. They are also able to share the pride tree care companies exhibit in their work.

The Excellence program is not designed as a competition but as a measure of quality work that upholds the highest professional standards of the industry. This means that there can be multiple entries that can earn the Grand Award.

Other benefits of the program include improved employee morale, recognition in the local community and among peers. Winning an award also enhances a company's reputation through announcements in various newsletters, national newspapers and TCI magazine. This is a chance for NAA member companies to further raise the bar of industry standards by performing exemplary tree care.

The National Day of Service brought together volunteers from 20 states to donate a day of expert tree care at Arlington National Cemetery. Some provided preservation and maintenance, such as pruning, fertilization, cabling and lightning protection, while others greeted visitors to explain the environmental, economic and social benefits of urban trees.

This was part of an ongoing volunteer effort providing professional tree care to our nation's public and private green spaces. The NAA has sponsored similar events at Ellis Island, Liberty Island, and Independence Hall, as well as at Arlington Cemetery in 1993. The dollar value of the gift is estimated at $400,000; the environmental benefit—truly invaluable.

Now in its ninth year, the prestigious Associations Advance America Awards recognize associations that propel America forward—with innovative projects in education, skills training, standards-setting, business and social innovation, knowledge creation, citizenship and community service. Although association activities have a powerful impact on everyday life, they often go unnoticed by the general public.

"The NAA's programs truly embody the spirit of the Associations Advance America campaign," remarked ASAE President Michael S. Olson. "It is an honor and an inspiration to showcase these activities as an example of the many contributions associations are making to advance American society."

For more information on the NAA's National Day of Service or Excellence in Arboriculture Awards program, contact the NAA at 800-733-2622.

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A Proposal for Change in a Dynamic Environment

By Dr. David G. Nielsen

Bronze birch borer and its D-shaped emergence hole. Some borers, including bronze birch borer, are opportunists that colonize stressed trees. Keep birches well watered during droughts. Other borers, including lilac borer, are more common in trees and shrubs in landscapes than in undisturbed forests. We do not know why. This is one of the challenges of plant health care research.

Plant Health Care: The Promise of a Beautiful Landscape

Background and Justification: The art and science of arboriculture made giant strides during the 20th Century, as we moved from chain saws and pickup trucks to the Internet and Global Positioning Systems. Demand for our services is at an all time high. U.S. households spent a record $16.8 billion on professional landscape/lawn care/tree care services in 1998, according to a recent Gallup survey. Other, recent surveys reveal that homeowners appreciate the value and importance of tree care, but they also have low expectations regarding the timeliness and quality of service they receive. As demand for quality plant health care increases, and as more young and better-educated folks enter the workforce, arborists will be forced to improve their understanding of basic plant growth processes and to enhance their level of service and professionalism. The information age mandates that we all continue to learn if we wish to compete successfully for clients. The tools of tree surgery are still important,
but we need to become much more knowledgeable about plant requirements and much more sophisticated in our approach to providing agronomic and horticultural practices and procedures.

Objectives:

1. revisit the conceptual framework of plant health care (PHC) and pest management;
2. consider where we are today in terms of understanding and implementing the principles of PHC;
3. share an idea that just might facilitate extension of these principles in everyday landscape management.

Many of my professional comments during the past 30 years have been directed toward owners and managers of arborist firms. This time, I might be providing an idea that appeals more to workers on the front line.

Methods and Materials: I presented the framework of PHC or tree health care (THC) for arboriculture at the ISA convention in Hartford, Connecticut in 1980. The concept was published in a paper called, "Alternate Strategy for Arborists – Treat the Tree, Not the Customer," published in Weeds, Trees & Turf in 1981. I suggested a change in the way arborists conceptualize pest control activities. Instead of keying on target diseases, insects and weeds, the idea was to consider trees as the primary target and clients as folks who need information. This rather radical idea placed pests in a secondary role, and asked the question: What do trees and shrubs really need? The idea was an attempt to have arborists learn more about trees and their clients. This would allow the arborist to do a bet-
The original model suggested that we begin to think more about plant needs. It seemed like a good time to begin to de-emphasize consideration of pests and to emphasize development of a holistic, comprehensive landscape management strategy, much as physicians now emphasize holistic medicine. Instead of providing scheduled pesticide applications, tree maintenance procedures would be implemented on a prescribed schedule to enhance tree vitality, thereby helping the plant protect itself against assault by opportunistic organisms like root rot fungi and wood borers. This change requires investment, both in terms of education for managers and practitioners, and marketing information for homeowners, landscape superintendents and other potential clients. The idea was to sell a tree or plant health care program that emphasized scouting and inspection, with pesticide applications, fertilization and other tactics used only when needed. The new service ethic for arboriculture would emphasize client and public service, not preventive or unnecessary pesticide and fertilizer usage. The new product was Tree or Plant Health Care.

To implement this approach to landscape management, we need to better understand the relationships between environmental stresses, cultural practices and plant health and opportunistic pests. We then need to develop planting strategies and cultural programs for plants that reflect these relationships. Plant and site management minimize the need for preventive pest control tactics and reduce the need for rescue treatments.

Some of the basic principles of integrated plant management, or PHC, are:

1. understanding plant requirements;
2. understanding public/client attitudes;
3. understanding plant/pest relationships;
4. inventory and survey;
5. scheduled inspections (monitoring);
6. informed agronomic and pest control decisions;
7. integration of integrated pest management with PHC.

In the original paper that suggested this conceptual model, I indicated that, “Tree health care as a strategy for optimizing pest control services requires state-of-the-art familiarity with pests and trees. This is a professional challenge to modern arboriculturists.” These statements are still useful as we consider arboricultu-
ture in the next century. But how can we implement the principles of PHC in arboriculture? Remember, nearly 20 years ago, an arborist from a leading firm told me that, “We know what to do, but there just isn’t enough time to do it.”

Results: Although practitioners and scientists have been considering some of the issues involved in PHC during the past 20 years, including problems that limit its adoption and usage, there is still significant resistance within the profession. While presenting a program to a group of arborists in Colorado last February, I was told by one of the attendees that although he embraces the concept of PHC in arboriculture; he simply has too many clients to implement a PHC program.

Some arborists now offer PHC programs to at least a segment of their client base. It’s certainly too early to decide that PHC sounds good, but that there just isn’t time to do it, especially for larger companies.

With all due respect to the skeptics and with understanding that change is usually difficult and often painful, I’d like to share a quote: “If you are convinced that a project or procedure is impossible, be at least courteous enough to stand out of the way while an optimist gets it done.”

... (anonymous).

Let’s examine how PHC can become more commonly practiced in landscape management and see if we can find some optimists to give it a try.

Conclusions: I believe that one of the most important things we can ever do for another person, aside from offering them friendship, is to share an idea that might be important to them. Perhaps now is the time for me to explain why, at the beginning, I indicated that this article might be most appropriate for youngsters eager to work in landscape management. The idea that I would like to share is ... professional gardening. Is it desirable or possible to instill the ethics of gardening into the profession of arboriculture? Is the thought already there but seldom practiced by arborists? Perhaps it’s time for someone to champion this ethic as a model for implementing PHC in landscape management, including arboriculture. Of course, gardening isn’t the answer for all clients, but there is certainly a growing demand for this level of landscape care. The people I know who practice professional gardening are pleased with their choice of labor, earn an excellent income, choose their clients, enjoy tremendous job satisfaction, and work with little stress.

I’m not suggesting that arboricultural firms can begin to offer gardening services or that only gardeners can implement effective PHC programs. But, if company size or client base is too large for you to overcome the challenges associated with implementing the principles of PHC in your business, then perhaps gardening can take up this challenge and seize the opportunity. This won’t exclude arborists, because they will be used to augment the activities of pro-
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definition and add it to the definition of arboriculture to help us move forward. The key term to borrow here is establishment. We have learned during the past 50 years, at least, that initial investment in plant establishment pays large dividends in terms of low input sustainability: Plants that are planted properly in the right place and are nourished during their establishment phase are the clear winners and often require less long-term care.

The ISA adopted the term Plant Health Care, not Tree Health Care, as the conceptual model that would help arborists reach a new level of professionalism and service. Does that decision send the message that arborists really wish to communicate to the public and their clients? As arborists, are we in the business of PHC or THC? If it is THC, maybe we need to say so and focus on learning everything we can about trees and then design programs that enhance or maintain tree health. That’s a big job, and the gardener’s ethic will be helpful. But, if we sell ourselves as PHC practitioners, then perhaps we need to embrace the entire landscape and learn all we can about how all landscape management practices impact health of the landscape, including trees and shrubs. Those who wish to do this
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will benefit by learning and practicing good gardening principles.

There may be arborist firms who will embrace a gardening ethic and develop a gardening segment within their business to diversify their organization. There may be some that will decide to become professional gardeners, rather than practicing arborists. I'm not suggesting that those who enjoy working exclusively with trees alter their course and begin an educational program that would qualify them to become gardeners. However, this is an option that is not widely known or appreciated. I am asking if a gardening ethic is a way to begin to implement the concepts and principles of PHC in more landscapes.

Sometimes I think it might be enough to be passionate about trees and to learn all there is to know about their characteristics and culture. Certainly, this is a worthwhile life's pursuit. But, for those who wish to deal holistically with landscapes, including tree health, there is more to the equation. There is need for growth in how we perceive our role and how we might reshape our mission. Perhaps we need to examine how we conduct our business today and how we might change the way we do business to do a better job for trees and people in the 21st century.

Estimated Total Cost: The cost of raising arboriculture to a more professional and respected position in our culture will be the pain associated with change. If you haven't bought a computer and learned how to use it efficiently yet, there will be a cost for hardware, software and training. However, these costs are really an investment that returns a nice profit, quickly. If you haven't been attending seminars and other kinds of professional meetings that provide educational sessions, then this will be a new cost. But, again, you'll find these costs to be investments with quick payback. If you haven't hired someone with a degree in landscape horticulture, or if you haven't taken at least basic horticulture courses at the nearest educational institution, then plan on doing so. Once again, education is almost always a wise investment. The ability to find, understand, interpret and use information will be essential in order to provide an acceptable level of PHC as a landscape professional in the 21st Century.

Likely Beneficiaries of Proposed Change: Landscape plants of all kinds, clients, practitioners and society.
A Gardener's Ethic

Treat each garden as your own; don’t use anything there that you don’t understand or is not needed; build a relationship with the customer in order to understand their expectations; look at the garden and the plants in it as a whole “being,” realizing that each component relates to the others. Understand the site and the plant’s needs, and keep in mind that a garden is continuously changing: It is not static in the least.

I wish to thank a young gardener from Michigan for sharing her thoughts about gardening.

Comments: Some of you may have noticed that I’ve used the format of a grant proposal to structure this article. I have used the proposal format because what I’ve tried to provide is a proposal for changing the way we conceptualize plant health care and pest management for landscapes. If the size of your client base is an impediment to implementation, then we need to find a way to overcome this impediment. If this means that we need to encourage young folks to consider joining the ranks of professional gardeners, then that’s o.k. If this means that arborist firms who wish to provide more than a tree service need to segment their client base to accommodate the demand for PHC, then that’s o.k. If it means that we need more and better trained landscape horticulturists interacting with tree care professionals, then so be it. After all, life is all about growth and service, two things that drive the profession of arboriculture. Let’s be optimistic about market demand and be willing to accept and examine the challenges of the new century. All of us will be required to become better and more enthusiastic students.

If we are willing to become better students, what will we need to learn? Some of what we’ll need to learn has not yet been discovered or developed. We do need to consider factors that drive plant and business health. Just for the record, I’ve listed ten topics for information growth in plant health management and suggest important professional needs for arboriculture.

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Plant Health Management

Topics for 21st Century:
• Plant growth
• Soils (biological, chemical and physical properties)
• Site preparation
• Plant selection (matching plants to sites)
• Plant tolerance to soils, exposure and pests
• Installation (knowing how and doing it properly)
• Plant resistance to arthropods and disease
• Fertilization procedures and effects
• Plant and pest monitoring tools and procedures
• Pesticides & Pesticide application technology

Professional Needs in Arboriculture in 21st Century:
• Uniform (clothing and equipment)
• Education
• Do it now (including call-backs & keeping appointments)
• Whatever it takes
• Information technology
• Employee Recruitment, Retention & Education
• Marketing
• Diversity
• Flexibility
• Optimism with critical thinking

At least some of these topics probably sound familiar. I know that employee recruitment and retention are topical issues throughout the green industry. Each of you could make your own list that better reflects your business and your vision for the future of this service industry. The important point is to develop a framework that makes sense to the applications part of your business.

As we plan our activities in arboriculture, let’s remember the ethic of gardening and resolve to do what’s right for plant health, not just what we need to do to maximize profits. Let’s learn all we can about plants to enhance our profession. And, let’s begin a widespread marketing program to stimulate landscape owners to seek-out our services: We need to provide them with reasons to buy. We need to send the message that arboriculture is relevant, and explain how our product, healthy plants, connects to client lifestyles.

Enjoy your professional journey in the 21st Century. I hope that the decisions you make will lead to successful and enjoyable relationships with your employees and your clients. Good luck. And, bon voyage.

Dr. David G. Nielsen is Professor Emeritus in Department of Entomology at The Ohio State University/OARDC in Wooster, Ohio.
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It appears unlikely that any arborist will have to cope with any significant changes to our tax laws in the months ahead. If the Republicans are successful in diverting those projected budget surpluses back into the pockets of taxpayers, few expect the resulting tax cuts to benefit businesses. The most recent tax plan that passed Congress last month does contain some breaks for businesses, but those are concentrated mainly toward companies with expensive research and development costs, which won’t help tree care firms at all.

A repeal of the estate tax certainly would assist tree care company owners in passing their businesses on to their children, but Clinton’s threatened veto seems certain to be sustained.

There are, however, a few controversies remaining from last year (1998) that make tax planning in 1999 more of a necessity than ever.

The controversies

The Internal Revenue Service appears hell-bent on requiring everyone to capitalize business expenses. They’ve forced the issue with commissions, business acquisition costs, startup costs, asbestos removal and loan origination fees.

In addition to planning now to cope with the IRS’s increased examinations of the way every arborist treats routine business expenses, every professional arborist should also be aware that similar controversies exist in the areas of environmental cleanup costs, employee vs. independent contractor and personal vs. business expenses. All require planning if a tree care business is to avoid surprises by a zealous IRS.

Tax planning is a process of looking at various tax options in order to determine when, whether and how to conduct business and personal transactions so that taxes are eliminated or reduced. Fortunately, the courts—if not the Internal Revenue Service—strongly back the arborist’s right to choose the course of action that will result in the lowest tax liability.

Reducing taxable income

By beginning that tax planning now, many times a tree care and landscape maintenance business owner can legitimately deduct benefits that would otherwise be classified as nondeductible personal expenses. No owner should overlook the possibility of purchasing health insurance, investing for retirement or providing perks like a company car through the business. But perks, particularly those that benefit the owner of a closely held tree care operation, require advance planning.

Timing depreciation

Depreciation deductions begin in the tax year in which property is “placed in service.” That means merely buying depreciable property during 1999 is not enough. To claim the depreciation deduction, the property must be put into productive use in the tree care business before the end of the year.

All nonresidential real estate must be depreciated using a mid-quarter convention. That is, the property is treated as being placed in service in the middle of the month in which it is actually placed in service. For most other depreciable property other than real estate, a mid-year convention is used. This means that regardless of what month the tree care business starts using the property, it is treated as if use began in the middle of the month. Generally, that means one-half of the first year’s depreciation, regardless of when the property was placed in service.

If Uncle Sam will allow one-half year’s tax break for asset purchases made at any time of the year, why not purchase all business assets at TCI EXPO in November and put them to use in the final days of December? That strategy would give you a half-year’s depreciation while at the same time, avoiding a cash outlay until late in the year. The IRS is aware of this possibility and imposes a so-called “mid-quarter convention” to prevent you from doing just that.

The mid-quarter rules apply if a tree care or landscape maintenance business puts more than 40 percent of its total of newly acquired property for the year into service in the last quarter. Any business that does not use the mid-quarter convention for all assets placed in service during the year.

Section 179

If you are buying new equipment at TCI EXPO, Section 179 of our tax law permits every tree care professional to claim an expense deduction of up to $19,000 of the cost of all newly acquired business assets that would otherwise have to be depreciated and written-off or deducted over a period of time. Of course, a tree care operation without income might be better off with depreciation deductions to offset the higher income expected in the years ahead.

With Section 179, that unique expensing election is optional; it doesn’t have to be taken this year. Naturally, if it is not claimed this year, the cost of all of this year’s newly acquired business assets becomes a capital expense subject to depreciation deductions each year it remains in service. There is no second chance for ignored equipment acquisitions this year.

At the other end of the spectrum, it should be remembered that only $19,000 may be claimed as a Section 179 expense,
regardless of how much equipment or business assets were acquired during 1998. For every dollar in excess of $200,000 spent on business assets in 1999, that $19,000, Section 179 expensing deduction must be reduced by $1.

**Overlooked and misunderstood**

**Entertainment:** Business doesn’t have to be all business for a tree care business owner to deduct 50 percent of ordinary and necessary expenses of entertaining a customer, client or even a supplier—so long as it is directly related to business. The Republican-backed tax bill passed last month would increase the deduction to 60 percent. Naturally, it is essential to keep excellent records of all entertainment expenses documenting not only the expense but also the date, the person entertained, the business purpose and the business relationship.

**Gifts:** Gifts valued at up to $25 per person per year are deductible. If you gave Christmas gifts or presents to employees, at least part of the cost may be tax deductible. Documentation is required specifying the amount, the recipient and the business relationship.

**Public relations, promotion and marketing:** These important marketing costs are often forgotten. Hiring someone to send out press releases, compile mailing lists or leaflet a neighborhood are all tax deductible.

**Professional expenses:** Every owner has expenses related to the tree care business that are deductible—if not overlooked. Professional publications, for instance, include not only trade magazines, but also other magazines, newspapers, newsletters or books related to the tree care business. They are deductible.

Similarly, dues to a trade association, even a chamber of commerce or other professional group, are deductible. Obviously, an arborist cannot deduct dues for private clubs such as social or athletic clubs.

**Lower tax rates**

Although no tree care professional can literally lower his or her tax rate, year-round planning offers opportunities that can produce similar results:

- Choosing the optimal form of organization for the business (such as sole proprietorship, partnership, corporation or S Corporation).
- Structuring a transaction so that payments received are classified as capital gains. Long-term capital gains earned by non-corporate taxpayers are subject to lower tax rates than other income.
- Shifting income from a high-tax bracket individual (such as the business owner) to a lower-bracket individual (such as the owner’s child). One fairly simple way to accomplish this is by hiring your children. Another possibility is to make one or more children partners in the tree care business, so that net profits are shared among a larger group.

While the tax laws limit the usefulness of this strategy for shifting “unearned” income to children under the age of 14, some opportunities to lower tax rates still do exist. But, once again, the time to think about those strategies is during the course of the tax year.

**Restriction on tax planning**

Despite the restrictions and despite the fact that there will not, in all likelihood, be any significant tax law changes to plan for, everyone should immediately begin thinking how to reduce 1999 income tax bills.

Incorporating tax planning into the day-to-day operation of your tree care business will enable you to achieve a low tax bill this year—and low tax bills for the next few years at least. But it requires planning for the balance of 1999.

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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Climbers, 25-year established, premier company in Clearwater, Florida is seeking experienced climbers. Certification preferred. Drug-free workplace. Please fax resume to (727) 507-TREE (8733) or call us Monday to Friday, 7 a.m. to 5 p.m. at (727) 535-9770. Westenberger Tree Service, Inc. 2030 58th Street North, Clearwater, FL 33760.

Hawaii - Tree Climber. Applicant MUST have a minimum of 5 years climbing (which includes pruning, shaping, rigging, take downs and removals) and experience working with cranes. Line clearance experience would be helpful. Pay starts at $18.00 per hour but is based on experience. Benefits include paid medical and dental insurance, paid federal holidays, vacation pay, 401(k) pension plan and a profit sharing plan. Send resume with salary history and employment references to: Jacunski's Complete Tree Service, Inc. P.O. Box 4513, Hilo, Hawaii 96720. Phone: (808) 959-5868 Fax: (808) 959-0597

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Tree Climber for golf course. Experienced. Must be self-motivator. Good salary, benefits. Fax resume to 914-698-7972 or phone 914-698-2827.

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Urban Line Clearance Program Supervisor
Starting Salary: $32,887 - $40,070
The Public Works Commission (PWC) of the City of Fayetteville is seeking an individual to direct and assist in urban line clearance and vegetation management programs in its Electrical Construction Department. Individual will be responsible for tree pruning and removal; consulting with contractors; developing informative presentations for various community organizations and the general public concerning urban line clearance projects; compiling and maintaining detailed computerized reports and schedules. Candidate must have knowledge of safety regulations and procedures associated with tree trimming and knowledge of environmental compliance practices. Individual must be able to detect tree diseases; negotiate applications and methods of vegetation management and use applicable computer software. Successful candidate must be able to plan, schedule and manage multiple projects; exercise prudent judgement when working with contractors and contractor personnel.

Special Requirements: Must be able to secure and maintain a valid Class "C" North Carolina Driver's License.

Minimum Qualifications: Graduation from an accredited two (2) year college or technical school with a degree or certification in forestry, arboriculture or related field and a minimum of two (2) years of responsible experience in urban forestry/arboriculture or electric utility tree trimming work including supervisory or lead worker responsibilities; or graduation from highschool and a minimum of four (4) years of responsible experience in urban forestry/arboriculture or electric utility tree trimming work including supervisory or lead worker responsibilities; or an equivalent combination of education and experience.

Applicant will be required to submit to a pre-employment physical and substance abuse screening.

Candidates may mail, fax, or e-mail their resume and cover letter (until position closes on 10-8-99) to:
Public Works Commission - G. Williams
(Re: Urban Line Clear. Prog. Supv.)
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Fayetteville, NC 28302-1089
Fax: (910) 829-0205
E-Mail: spowell@hotmail.com
Only candidates selected for an interview will be contacted.
EOE/AA

... continued on page 54
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95-3262 1986 GMC 7000, diesel chassis, automatic trans., air brakes, with an Altec AM600 (0786-R0374), 56 ft. working height, one man side mount platform, over rear axle mount, service body. $36,500.00

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- Division Manager w/5+ years experience
- Climbers-Class I and II
- Foreman and Bucket Operators
- Tractor Operators

CDL License, experience in arboriculture, urban forestry or related fields a plus. We offer excellent starting wages, company benefits, excellent working conditions and the opportunity for year-round work. For a confidential interview, mail or fax your resume to: DeAngelo Brothers, Inc., 8450 West 191" Street, Mokena, IL 60448. Attn: Bruce Greer. Phone: 815-464-9862; Fax: 815-464-7152. EOE / AAP / M-F
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Qualified applicants must have proven leadership abilities, strong customer relations and interpersonal skills. We offer excellent salary, bonus, and benefits packages, including 40(k) and company paid medical coverage. For career opportunity and confidential consideration, send or fax resume, including geographic preferences and willingness to relocate, to: DeAngelo Brothers, Inc., Attention: Paul D. DeAngelo, 100 North Conahan Drive, Hazleton, PA 18201. Phone: 800-360-9333; Fax: 570-459-5500. EOE/AAP M-F.

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... continued on page 56

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... continued on page 60
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TCI EXPO '99

60 TREE CARE INDUSTRY - SEPTEMBER 1999
International Tree Climbing Championship

The ISA's International Tree Climbing Championship (ITCC), held last month in Stamford, Conn., once again showcased the finest climbers in the world in a spirit of friendly competition.

The competition reached an important milestone this year. For the first time in Jamboree/ITCC history, a non-U.S. climber won the Masters Challenge. The ITCC Rules Committee and event organizers are to be commended for leveling the playing field for all competitors without sacrificing safety. Bernd Strasser, who has been knocking at the door for several years, deserves recognition for his perseverance.

The level of skill and professionalism exhibited by the contestants was inspiring for the professionals and members of public who were fortunate enough to be present.

Germany/Austria Chapter
Bernd Strasser
Bernd is self-employed and has been climbing for five years. He finished fourth in the all-around at Hilton Head and has been competing in Jamborees in Europe since 1994, placing second in the German and French Open Jamborees in 1995. He was fifth overall at the International Jamboree at Halifax in 1994, with a third-place finish in the Aerial Rescue. He is the reigning champion of the German Jamboree and finished second last year in the Master's Challenge in Birmingham, England.

Second Place
New England Chapter
Mike Jerome
Mike has been climbing for 18 years and competing for five. He won the New England Chapter Championship in 1998 and 1999 and finished second in Footlock last year in Birmingham, England. Mike is the General Manager of Bark Buster Tree Service in Weston, Mass.

Third Place
Southern Chapter
Tony Brown
Tony is owner-operator of Brown's Tree Service. He has been climbing for 13 years and competing for seven. He placed first in Throwline at Internationals in 1993 and 1998 and second in Aerial Rescue in 1994. He is a seven-time Southern Chapter All-Around Champion.

Fourth Place
New Jersey Chapter
Mark Chisholm
Mark, 1997 ITCC Champion, has been climbing for 15 years, was eight-time NJ Chapter Champion and placed in the top ten each time he completed at international. He works for the family business, Aspen Tree Expert Co. He produced a video on proper rigging and conducts climbing seminars.

Fifth Place
Western Chapter
Gary Abrojena
Guy has owned and operated Evergreen Tree Care in the San Francisco bay area of California for 19 years. He has been competing for six years and has won the Western Chapter title three times. He placed third in Footlock and Work Climb events at the 1997 International.
Italy Chapter
Alberto Anzi
Alberto has been working in arboriculture since 1986, primarily as a climber. He started climbing using European technique and expanded his skills by combining them with American techniques he has picked up along the way. This was Alberto's second visit to the international competition as the Italy Chapter representative.

Illinois Chapter
Jason Austin
Jason is currently working for Davey as a Tech. He is also a student at Harper College majoring in Plant Science Technology. In 1999, Jason graduated from the Davey Institution of Tree Sciences.

Sweden Chapter
Benoit Broussard
Hartill-TRAD Expert of Jorlanda, Sweden has employed Benoit as a climber for the past two years. In addition to his work experience, he has completed a ten-week course in tree surgery. Prior to winning the Sweden competition, Benoit competed in the United Kingdom competition, finishing third in the Footlock event. This was his first time representing the Sweden Chapter at an International event.

Indiana Chapter
Randy Brumfield
Randy lives in Martinsville, Ind., and works for the Bartlett Tree Expert Co. He has 13 years of experience and has been competing at the chapter level for four years. This was his first visit to the international championship.

Mid-Atlantic Chapter
Mike Cotter
1998 International Champion, Mike has been climbing for 16 years. He currently works for Ex-cel as General Manager-Climber Training. This was his fourth visit to the International Championship. In his first three, he made it to the Master's Challenge twice, finishing third in 1997 and winning in 1998 in Birmingham, England.

Norway Chapter
Melch Cumin
Melch started climbing in the fall of 1995 after three years of experience with forestry in Switzerland. He is a Swiss Certified Arborist. He has competed in three Swiss national climbing competitions. He begin working for AB Treleie in Haslum, Norway in 1999.

New York Chapter
Bruce Duffey
Bruce, owner of B&D Tree Service, has 15 years experience and is a member of the New England and New York chapters of ISA. At the New England Chapter Competition, he was runner-up three times and represented the chapter in the 1997 International Championship. Bruce participates in Arbor Day projects and works with local high schools, providing information about arboriculture.

Wisconsin Chapter
Sean Gere
Sean has been climbing for eight years and has been the Wisconsin Chapter representative to International competition for three years. He is a finalist in the 1999 International ArborMaster Skills Competition and is an avid recreational climber. He is doing some climbing-based research for the Department of Natural Resources and donates some personal time to volunteer tree care activities.

Australia Chapter
Brett Hamlin
Brett is a self-employed arborist working in Queensland, Australia. He has eight years of climbing experience and has participated in the ArborMaster Training Series. He placed second in the 1997 Australia national championship with a top place finish this year in Melbourne last November.

UK/Ireland Chapter
Jon Hartill
Jon is owner-operator of Hartill-TRAD Expert in Jorlanda, Sweden. He has been climbing for 12 years and competing for the past eight. This was his second time representing the UK/I Chapter at the International championship. Jon also competes in pole climbing events and was the 1993 European Champion. He is a FASTCO Registered Instructor, providing tree climber training in Europe.
Florida Chapter
Gene Hayden
Gene has worked in the industry for seven years and is currently a General Foreman/Safety Supervisor on a utility line clearance crew. He has competed in the last three chapter competitions and looks forward to learning a few new techniques in the process.

France Chapter
Guy Herremans
Guy is representing the France Chapter, of ISA. He is from Belgium and works in the consulting department of a tree care company in Spain.

Midwestern Chapter
David Hill
David is employed by Droge Tree Care of St. Louis, Mo. He has been climbing for 11 years and is an ISA Certified Arborist. He has been competing in chapter events for four years. This was his first visit to the international championship.

Pacific Northwest Chapter
Dan Kraus
Dan has worked as a climber since the age of 17. He is a six-time champion of the Hawaiian State competition and has competed and won chapter championships in the Western, Pacific Northwest, and Rocky Mountain chapters. This was his second visit to the International. In 1998, Dan won the preliminary events in Birmingham and placed fourth in the Master's Challenge.

Atlantic Chapter
Danny LeBlanc
Danny has 12 years of climbing experience and nine years of local competition experience. He proudly represented the Atlantic Chapter at the ITCC for the sixth time. His best finishes were in Hilton Head in 1995, placing 15th overall and a fifth-place finish in the Footlock event in Birmingham, England last year.

Texas Chapter
Guy LeBlanc
Guy began his career 24 years ago in Boston, Mass. For the past 16 years, he has owned and operated ArborVitae Tree Care in Austin, Texas. He has been competing in competitions for the past two years and represented the Texas Chapter last year at the International competition in Birmingham, England.

Mid-Atlantic Chapter
Mark Moeske

Quebec Chapter
Charles Moreau
Charles has been in the tree business for 22 years. He worked on a utility line clearing crew for 12 years and then began working on residential trees. He then stated his own business, CLM Tree Service Inc., in 1997. He lives in St. Marc Sur Richelieu, Quebec.

Ontario Chapter
Cohn Naftel
Cohn started climbing for The Davey Tree Expert Co. in 1972 and since that time has worked with Toronto-area city forestry departments in Mississauga and Etobicoke. He is now self-employed and runs Colin R. Naftel Tree Service and Surgery in Toronto. He has been an ISA Certified Arborist since 1994. This was his second trip to the ITCC.

Prairie Chapter
Dwayne Neustaeter
Dwayne is an arboriculture instructor at Olds College in Alberta, Canada. He has 12 years of climbing experience and has competed at the international level for four years. He is also the president of ArborMaster Training Canada, Inc.
Penn-Del Chapter
Gary Nirmaier
Gary is Arbor Division Manager for Hazlett Tree Service in Townville, Penn., where he also provides climbing technique instruction. He has been climbing for 16 years and enjoys hosting Arbor Day programs and educational promotions for elementary schools. He won the Penn-Del Chapter Western Climbing Championship in 1997 and the Eastern Championship in 1999.

Rocky Mountain Chapter
Jon-Paul Paulsen
Jon-Paul, employed by Asplundh Tree Expert Co. as a line clearance tree trimmer, lives in Clinton, Mont. He grew up helping his father harvest walnut trees for use in his stock caring business. He is a two-time Montana state tree climbing champion. This was his first visit to the international as the Rocky Mountain Chapter representative.

Minnesota Chapter
Tony Sackett
Tony has been working as a climber for seven years. He is a pruning foreman for Rainbow TreeCare of St. Louis Park, Minn. This is his second trip to the International Championship. Last year in Birmingham, England, in his first visit, he made it into the Master’s Challenge.

Spain Chapter
Francisco Vilarrubias
Francisco is a self-employed arborist who lives in the little villages of Les Cabanyes near Barcelona, Spain.

Ohio Chapter
Adam Williams
Adam started climbing in 1993 and became an ISA Certified Arborist in 1997. He has completed the ArborMaster Training Series and Electrical Hazard Awareness Program. Adam works for the Davey Tree Expert Co. in Worthington, Ohio.

New Zealand Chapter
Paul Wynen
Paul is a tutor at Waikato Polytechnic, teaching the practical aspects of arboriculture. He has been working in the field for six years and was the safety-training officer for a large arboriculture firm for three years. He has a diploma in arboriculture. This is Paul’s second visit to the International as the New Zealand representative. He placed third in the Work Climb event last year in Birmingham.
Pruning Conifers

A report on the results of the PlantAmnesty “Think Trunk” conifer symposium

By Cass Turnbull

The PlantAmnesty Tree Programs Committee hosted an invitational round table discussion in late winter of 1998 on the topic of thinning conifers to increase stability in high winds. In attendance were two certified consulting arborists, one educator, one retired extension agent, several owners of tree care companies. About half of the working arborists had over 20 years in the field.

The original intent of the symposium was to begin a process of setting pruning guidelines for thinning Douglas firs and possibly other conifers, since little has been written on this subject. It was felt that many companies, and certainly many customers, were over-thinning conifers under the general belief that if a little is good, a lot is better.

The opinions of the group varied widely. The retired extension agent felt that it was advisable to selectively head back branches that were over-extended beyond the general perimeter of the tree outline. The educator objected, saying that heading cuts (short cuts), even to laterals, were ill advised. She stated that selective heading cuts are harder on tree health than thinning cuts (that removed branches or laterals at the collar). The extension agent asked for the scientific basis of this opinion.

One of the consulting arborists remarked that he generally recommended up to one-third of the limbs be removed, in a spiral fashion up the trunk, to allow more wind to pass through the canopy. He called this inter-limbing.

The other consulting arborist suggested that thinning to reduce sail was of no use whatsoever. Her opinion was that most conifer failures were due to root rots and other weaknesses that were not “cured” by thinning.

Consensus developed that hemlocks were by far the most prone to failure during windstorms (because they are prone to root and butt rots, and were intolerant of construction damage common in new home developments).

Of the working arborists with the most experience, it was conceded that some thinning does reduce the likelihood of failure, but most felt that removing 20 percent of the canopy would be the upper limit. Twenty percent removal of green canopy would be considered only under certain circumstances and was highly dependent on favorable factors such as total overall canopy and tree health, the existence of target, what kind of follow up care would occur, etc.

It was well noted that each situation was different and that it was difficult to make generalizations. Occasional, selective heading cuts were advisable under certain circumstances: 1) when a limb needed to be dealt with, but 2) when total limb removal was ill-advised.

Arborists with more experience made fewer and smaller cuts than younger arborists. The long-term adverse effects of thinning and over-thinning remain unstudied and not quantified in research.

Possible negative impacts of thinning to reduce sail include: die back of fine roots, loss of stored energy as the tree uses it to compartmentalize, loss of limb strength and taper, reduced vigor due to removal of photosynthetic material.

The “working” arborists generally preferred to concentrate thinning in the top quarter of the tree and the last quarter out on the limbs, using true thinning (long cuts). They agreed that even taking out the dead and broken limbs made a significant reduction in the sail, and perhaps was all that was needed. Also, arborists removed small branchlets that hung down from the limbs (droopers). The more experienced arborist warned against cleaning out the inside (Lion’s tailing). It was felt that internal laterals helped to distribute stress loads more evenly throughout the crown.

Essay on Douglas Fir Pruning

By Michael R. Pack

Dr. Alex Shigo tells us young trees can handle almost any thing. Since a tree is a cone on top of a cone, and the newest cone is the young tree, the top of the tree can handle the most thinning. Which is not to say that it should be harshly done.

Living tissue removal & tree health

Healthy trees can obviously stand more thinning than unhealthy trees. In unhealthy firs, the foliage tends to be paler in color, an olive or yellowish hue, rather than the typical deep green. Thin less in less healthy trees. Consider removal if they appear too unhealthy.

Double-decker branches

Consider removing one of two branches that grow close together in vertical align
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Auxins (growth regulators)

The shape of a branch, or the entire tree for that matter, is governed by auxins, growth regulators. When you remove the end of a branch, the overriding effect that these auxins had in regulating the shape of the branch is disrupted. Subsequently, growth near the point of the cut tries to assume the former shape of the branch. Why then, should we ever cut the end of a branch off unless the branch is structurally suspect or in need of a utilitarian pruning? The answer is - only as a last resort to removing the branch.

The trunk accountant

I use the metaphor of the trunk accountant for the technical term "symplast." The symplast is the living network of cells in a tree. The cells are connected somewhat like the nervous system connects the cells in a human being. When significant energy is removed from a tree, the "trunk accountant" demands an audit. If we remove too much energy producing material from any one portion of a tree, the tree will either produce sprouts or shed that portion, like closing down a division of a company that is not producing. On a Douglas fir, although I hate the suggestion of a "pruning recipe", I find that removing 15% of foliage in a healthy tree is a reasonable amount to remove to lessen wind resistance. I base this figure on experience. (I count needles as I prune; if I begin to remove too much, I hear, "Warning! Warning. Will Smith!")

Pruning target zones

In your mind's eye, see the region of a Douglas fir branch three quarters of the way out. You will notice that frequently it will divide into three sub branches. If you remove one of these, you will lessen the leverage of snow, rain and wind on the branch. Choose to remove sub branches in this zone that appear either too vigorous or declining. Do not remove too much in any one place. Distribute your pruning cuts!

Physics of weight reduction

Arnold Schwarzenegger. He has been my pruning metaphor for about 15 years. If I was Arnold Schwarzenegger and I held my arm out toward you, and you grabbed me around the elbow, I could lift you off the ground. However, if you grabbed my fingers, you could pull me down. This is with me being Arnold

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Schwarzenegger! If you thin out a branch near the end, you affect the leverage of its physical weight the same way.

Retaining inner foliage

Inner foliage helps the tree by providing an energy source in two ways:

1. When the stomata (respiratory cells on the bottom sides of the needles) of the outer foliage close down to retain water during excessive heat

2. By keeping the energy source closer to the stem and roots to facilitate transport.

Relative risk - the best you can do

All trees, because of their mass, constitute risk—this risk is relative to the target. What is the target? Is it a house? Is it people? Is it the preservation of the tree itself? Our job as Arborists is to preserve trees. In pruning, if you try to preserve each branch individually and cumulatively, you will protect the tree.

Summary

- Step back and see if the tree is worth saving before you do anything.
- Don't cut the ends of branches off.
- Thin the upper portions of the tree more than the lower portions. Lessen weight on heavy, overextended lower branches.
- Focus your pruning three-quarters of the way out on the branch to effect weight reduction. Try to balance weight removal from side to side. Distribute your cuts!
- Removing dead wood and badly rubbing and cracked branches will go a long way cumulatively in lessening resistance.
- Don't take out too much.


Editor's note:

ANSI A300 Tree Pruning Standards are under revision. Look for the second public comment period coming up this winter, which will be announced in TCI magazine. A300 Tree Pruning Standards are the industry’s performance standards for writing tree pruning specifications.

Some standards of performance required by A300 are:

- use thinning cuts as opposed to heading cuts
- do not remove more than 25 percent of foliage of a limb or the whole tree in a single year
- have one-half of the foliage evenly distributed in the lower two-thirds of the canopy upon completion.

In addition, A300 prohibits topping and lion's tailing.
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</tr>
</thead>
<tbody>
<tr>
<td>1. Accu-FELL</td>
<td>10</td>
<td>35. Jameson Corporation</td>
<td>12</td>
</tr>
<tr>
<td>2. ACRT, Inc</td>
<td>43</td>
<td>36. Lewis Utility Truck Sales, Inc.</td>
<td>22</td>
</tr>
<tr>
<td>3. Aerial Equipment, Inc</td>
<td>46</td>
<td>37. NAA - Basic Tree Climbing Videos</td>
<td>11</td>
</tr>
<tr>
<td>4. Aerial Lift, Inc.</td>
<td>Back Cover</td>
<td>38. NAA - Membership</td>
<td>61</td>
</tr>
<tr>
<td>5. Altec Industries Inc</td>
<td>31</td>
<td>39. NAA - Winter Management Conference</td>
<td>25</td>
</tr>
<tr>
<td>6. Altec Industries Inc. - Used Equipment</td>
<td>53</td>
<td>40. Natural Path Forestry Consultants, Inc.</td>
<td>19</td>
</tr>
<tr>
<td>7. American Arborist Supplies Inc</td>
<td>29</td>
<td>41. Northeastern Associates</td>
<td>70</td>
</tr>
<tr>
<td>8. Arbor Direct LLC</td>
<td>40</td>
<td>42. Opdyke, Inc.</td>
<td>13</td>
</tr>
<tr>
<td>10. Bandit Industries, Inc</td>
<td>15</td>
<td>44. The Peavey Manufacturing Company</td>
<td>71</td>
</tr>
<tr>
<td>11. Bartlett Manufacturing Company</td>
<td>45</td>
<td>45. Pete Mainka Enterprises, Inc.</td>
<td>44</td>
</tr>
<tr>
<td>12. Bartlett Tree Experts</td>
<td>54</td>
<td>46. Petersen Industries Inc.</td>
<td>54</td>
</tr>
<tr>
<td>13. Bishop Company</td>
<td>10</td>
<td>47. Rapco Industries Inc.</td>
<td>36</td>
</tr>
<tr>
<td>15. Border City Tool &amp; Manufacturing Company</td>
<td>68</td>
<td>49. Royal Truck &amp; Equipment Inc.</td>
<td>59</td>
</tr>
<tr>
<td>16. CAG, Inc</td>
<td>55</td>
<td>50. Sabre Saw Chain.</td>
<td>21</td>
</tr>
<tr>
<td>17. J.P. Carlton Company, Div. DAF, Inc.</td>
<td>7</td>
<td>51. SavATree</td>
<td>50</td>
</tr>
<tr>
<td>18. CEI</td>
<td>49</td>
<td>52. Schodorf Truck Body &amp; Equip. Company</td>
<td>40</td>
</tr>
<tr>
<td>19. Concept Engineering Group, Inc.</td>
<td>37</td>
<td>53. Sherrill, Inc.</td>
<td>52</td>
</tr>
<tr>
<td>20. Cummins Michigan, Inc</td>
<td>72</td>
<td>54. Southco Industries</td>
<td>1</td>
</tr>
<tr>
<td>21. The Davey Tree Expert Company</td>
<td>52</td>
<td>55. Southeastern Equipment Company</td>
<td>51</td>
</tr>
<tr>
<td>22. Deere Power System Group</td>
<td>14</td>
<td>56. Tamarack Clearing Inc.</td>
<td>27</td>
</tr>
<tr>
<td>23. The Doggett Corporation</td>
<td>45</td>
<td>57. Tamarack Clearing Inc.</td>
<td>60</td>
</tr>
<tr>
<td>24. Fanno Saw Works</td>
<td>58</td>
<td>58. Tanaka-International Sales/Marketing</td>
<td>44</td>
</tr>
<tr>
<td>25. First Sierra Financial Inc.</td>
<td>41</td>
<td>59. TCI EXPO '99 - Indianapolis, IN Center</td>
<td></td>
</tr>
</tbody>
</table>
A Sense of History

By Bill Holcomb III

I've been a tree worker for most of my life. I'm 39 years old and have been climbing almost daily for 23 years (yeah, that's right). I was taught much of my profession from my father, who in turn learned from his father. Our tradition goes back almost 60 years. Being connected to so much history, and being lucky enough to have people to share it with, has greatly enhanced my perspective.

By knowing where we came from, I am able to see the tremendous growth my industry has made.

When I spiked up my first tree to tie a pull line, I was wearing an old leather saddle my father had worn for years. It was bulky, heavy, and it was a great feeling. Thanks, Dad.

As time went by, we had our differences, and I began working for other tree care firms. I still remember my father telling me, "No matter what you do, just be the best at it." Thanks again, Dad.

As I traveled around from firm to firm, I met some really special people. Bob Wilcox taught me about quality without exception. He would send young climbers back up the tree every time to paint the shiners. The older workers knew better than to leave them! We don't paint anymore, but I send my guys up to re-address poor cuts. Thanks, Bob.

Ronny Hart taught me about the "hundred-mile stare." Climbers have it from looking at close details and from the spectacular views they witness every day. Thanks for pointing out the finer details of being a climber, Ron. Rest in peace.

Kent Pierce and Alan Carey taught me about the importance of education and were probably the most intelligent men I have met in my career. Thanks, guys.

I've seen many changes, mostly good, in my industry. But I also remember camaraderie among tree workers that doesn't seem to be as it once was. A simple wave or a helping hand when someone is down, seems less frequent today. "New Age" tree people, as my friend calls them, don't have this sense of history. Don't look down on me because my truck may not be brand new. What's more important is who gets out of that truck.

I've shared my experience with many people throughout the years. Some are now managers, company owners and salespeople. For myself, I'll keep climbing because I love it. Hopefully, when you see me in the office wearing comfortable shoes and clean clothes, it will be because I chose to stop climbing and not because I had to.

I spent many of my youthful nights drinking with my tree worker friends and many of those nights resulted in hangovers the next day. It wasn't until I stopped drinking almost nine years ago that I was able to reflect. I have been truly blessed to have a place in life — I can't call it a job — that I love, people in my life that I respect, both for their caring and for their commitment, and an industry that has given it all to me.

So, as I walk up to a giant sugar maple that has passed on, I am saddened. I remember a tree my grandfather did cavity work on some 40 years ago, a tree that my father pruned and then watched me prune. Now it has come full circle. My brother Dave and I, along with our nephew Steve, will soon remove this personal historic landmark. We will lower the giant limbs slowly to the ground, almost reverently and respectfully. When the work is done and a piece of our history is gone, we will plant a new tree in its place and start the whole cycle again with our sons and their sons and daughters.

So, when you come across older tree workers, listen to them. You'll gain a deeper understanding of our industry and all the contributions that have led up to today.

Bill Holcomb, III works with his brother Dave at Dave Holcomb Tree Service in Burlington, Conn., and is also a freelance climbing instructor.

Do you have a story for From the Field? TCI will pay $100 for published articles. Submissions become the property of TCI and are subject to editing for grammar, style and length. Entries must include the name of a company and a contact person.

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<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
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<td>• Tree and Shrub Damage due to Pruning or Care</td>
</tr>
<tr>
<td>• Property</td>
<td>• Damage from Striking Underground Cables, Pipes or Conduit</td>
</tr>
<tr>
<td>• Business Auto</td>
<td>• Pesticide and Herbicide Applicators Coverage</td>
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<td>• Equipment Floaters</td>
<td>• Spraying the Wrong Property/Location</td>
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<td>• Crime</td>
<td>• Credits for Seasonal Vehicles</td>
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<td>• Workers Compensation</td>
<td>• Accidental Discharge of Pesticides/Herbicides from Your Vehicles</td>
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<td>• Umbrella Coverages</td>
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Call Christine Augustyn today at 800-ARBORS1 (272-6771) ext. 1270 for a fast quote. Also ask about our convenient monthly payment plans and low Workers Comp rates.
THE HEIGHT OF SUCCESS IS

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E-Mail: aerialinfo@aol.com Company Website: http://www.aeriallift.com

Please circle 4 on Reader Service Card
TCI’99
EXPO
November 4-6
Indiana
Convention Center & RCA Dome
The sky is the limit with what you'll learn from this year's exciting program. Over 150 exhibitors under one roof, bringing you cutting-edge tree care equipment, technology, supplies and services.

The SMART MANAGER and EXPERT PRACTITIONER seminar series allow you to customize your educational experience to fit your needs - with several sessions offering pesticide applicator re-certification credits and ISA continuing education units.

Registration IS REQUIRED to obtain your admission badge. Register before the Early Bird deadline of October 8 to receive discounts on trade show admission and educational seminars.

SAVE, SAVE, SAVE ... Take advantage of the educational seminars ... BUY GOLD!
The National Arborist Association is pleased to offer a special workshop in conjunction with TCI EXPO '99. TCI attendees are invited to participate in this full-day workshop on Wednesday, November 3, 1999 at the Indiana Convention Center & RCA Dome in Indianapolis, Indiana.

This two-part workshop will address key business issues and will be taught in a small classroom format to encourage participant interaction.

The morning session will address motivation as one of the most important skills of a manager or supervisor. The afternoon session will address leadership and team building and how each separately and collectively is critical to the success of any business.

"He is real. He is experienced. He is motivated"

Robert J. Ash has been a professor of Management and Business at Santiago Canyon College in Orange, CA for the past 30 years. He is the chairman of the Business Department. He is principle for Ash and Associates specializing in Management, Supervision and Employee Training for both public and private industry.

Speaker: Robert Ash

Morning Session: 9:00 am - 12:00 noon

Understanding Motivation
Motivation is one of the most important skills of a manager or supervisor. This seminar will help you understand the behavior process - why people do the things they do; the motivation process - what happens in motivation; motivation theories; and burn out/peak-out - why it happens, who is responsible and how to prevent it.

Leadership and Team Building
Understanding leadership and building a team is critical to the success of any business. This seminar will help you understand the relationships and characteristics of a team; the phases of team building; leadership theories; and situational leadership and management.

Afternoon Session: 1:00 - 4:00 pm

Wednesday November 3, 1999
Indiana Convention Center & RCA Dome
Room #147 (Across from the White River Ballroom)
Registration Fee: $95

Workshop Schedule
8:30 am Registration opens (complimentary coffee)
12:00 noon Lunch not included
9:00 am Understanding Motivation
1:00 pm Leadership and Team Building
Restaurants in the vicinity available
4:00 pm Workshop Adjourns

Limited Enrollment. Early registration is encouraged.
Please use TCI EXPO registration form to indicate attendance at this program.
The products and services you need to achieve success with your tree care company are all under one roof. Attend TCI EXPO '99 and make a difference in your future!

ACRT, Inc.
ADI Pruning Tools
Aerial Equipment, Inc.
Aerial Lift, Inc.
Agape Designs
Alliance Equipment Company, Inc.
Altec Industries, Inc.
American Arborist Supplies, Inc.
The American Group - Samson Div.
American Safety Utility Corp.
AmeriQuip/MTI
ANMVAV Chemical
Arbor Direct LLC
ArborSystems, LLC
ArborTech
Arborwear Inc.
Asplundh Tree Expert Company
B & G Equipment
Bailey's
Bandit Industries, Inc.
Bartlett Manufacturing Company
Bartlett Tree Expert Company
Bashlin Industries Inc.
Bayer Corporation
John Bean Sprayers
Ben Meadows Company
Bishop Company
Blue Ridge Arborist Supply
Brown, Ken & Sons Inc.
Buccaneer Rope Company
Buckingham Mfg. Company, Inc.
CAG, Inc.
CNA Commercial Insurance
J.P. Carlton Company
Climb Axe, Ltd.
Columbian Rope Company
Corona Clipper
Creative Automation Solutions
Creative Sales, Inc. (CSI)
Data Transmission Network - Weather Center
The Davey Tree Expert Company
Deutz Corporation
The Doggett Corporation
Duskocil Industries Inc.
ECHO - Midwest Equipment & Supply Inc.
EngineAire
Engine Center Inc.
Engine Distributors, Inc.
Excalibur DMM
Excel Industries Inc.
FCI/Racine
FMC Corporation-APG Specialty Products
Fanno Saw Works
Fecon Resource Recovery Equipment
First Sierra Financial, Inc.
Forestry Equipment of Shelby, Inc.
Forestry Suppliers, Inc.
J.P. Fuller, Inc.
G & A Equipment Inc.
GNC Industries
Good Tree Care Company
Green Manufacturing
GreenPro Services
Grow Gun Corporation
Growtech, Inc.
Growth Products, Ltd.
Gyro-Trac Inc.
The Hartford
Hollie Wood Enterprises
Husqvarna Forest & Garden Company
I.M.L.-Instrument Mechanic Labor, Inc.
ImlleMax Equipment Company Inc.
 Independent Protection Company, Inc.
Indiana Arborist Association
International Society of Arboriculture
Jameson Corporation
Kramer Equipment Company, Inc.
Karl Kuehmerling, Inc.
Leonardi Manufacturing
Lund Tech, Inc.
Fred Marvin Associates
MAT-3, Inc.
J.J. Mauger Company
Midwest Arborist Supplies
Miller Machine Works
Minnesota Wanner Company
MIRK, Inc.
Monterey Lawn & Garden Products, Inc.
Morbark E-Z Beever Company
MTI Insulated Products
National Arborist Association (NAA)
National Arborist Foundation (NAF)
New England Ropes, Inc.
Niemeyer Corporation
Northeastern Associates
Nu-Arbor Tree & Shrub Care Products, Inc.
Oregon Cutting Systems, Div. of Blount, Inc.
The Peavey Manufacturing Company
Perco Printing
Pigeon Mountain Industries Inc. (PMI)
Plant Health Care Inc.
Plastic Composites Corporation
Polcat Industries, Inc.
Power Great Lakes Inc.
Practical Solutions, Inc.
Preformed Line Products
Progress Leasing/Quaker State Leasing Co.
Purdue University
Rainbow Treecare - Scientific Advancements
RAM Posiquip
Rayco Manufacturing, Inc.
Rear's Manufacturing Company
Remke Enterprises, Inc.
Roots, Inc.
Rootwell, Inc.
Royal Truck & Equipment, Inc.
Safety Test & Equipment Company
Salsco Inc.
Schodorf Truck Body & Equipment Co.
Service Communications Software
Shelter Tree, Inc.
Sherrill Arborist Equipment & Supply
Sierra Moreno Mercantile Company
Simonds Industries, Inc.
Southco Industries, Inc.
Southeastern Equipment Company
Stihl Incorporated
Sunrise Concepts, Inc.
Tamarack Clearing, Inc.
Tanaka
Terex Telelect Inc.
Tilton Equipment Company
Timberwolf Manufacturing Corporation
Tree & Landscape Equipment Traders
Tree Line Supply Company
Tree Management Systems, Inc.
TreeTech Microinjection Systems
TreePro Direct™
V.A. Wolf, Inc.
Vermeer Manufacturing Company
Versalift, Time Manufacturing Co.
Weaver Leather, Inc.
Wis-Con Total Power Corporation
Wood/Chuck Chipper Corporation
Wood-Mizer Products, Inc.
Woodman
Yale Cordage, Inc.
Zenith Cutter Company
WIN ARBORBUCKS!
There will be two drawings each day for at least $250 in ARBORBUCKS on the Trade Show floor. Drawings will be held on Thursday and Friday at 12:00 noon and 2:00 pm and Saturday at 11:00 am and 1:00 pm.

Just one more reason to join us at TCI EXPO '99!

Arborbucks Drawing Schedule

<table>
<thead>
<tr>
<th>Day</th>
<th>Time</th>
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<tr>
<td>Thursday</td>
<td>12:00 noon</td>
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<td>Saturday</td>
<td>11:00 am</td>
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<td>1:00 pm</td>
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$250 ArborBucks Cash
ARBORBUCKS can be used the same as cash to make purchases from participating vendors at the show. There is no cost to enter the drawing, and the chances of winning are fantastic!

All of this and more ... for only the price of admission to TCI EXPO '99
Thursday, November 4, 1999

7:30 am
REGISTRATION OPENS - Complimentary coffee available

8:30-9:45 am
KEYNOTE ADDRESS: STAFFING: KEY TO SUCCESS NOW AND IN THE COMING YEARS - Wayne Outlaw

No longer can we rely on traditional methods in today's tight labor market and competitive environment. Innovative and creative techniques must be eagerly sought out to get the quality and quantity of employees necessary to make the tree care company successful. It requires a capable and talented staff to serve customers. The cost of turnover and open positions will be examined, as well as the approaches to solving the most perplexing staffing problems. It will assist owners and managers in discovering how to identify and hire top people. It will look at the strategies that organizations, both in and out of the tree care industry, have used to ensure their organization is fully staffed with top people.

9:57 am
TRADE SHOW OPENS

Don't miss a single booth! Wear your walking shoes, because with over 150 exhibitors, there will be a lot of ground to cover. TCI EXPO is the largest tree care trade show in the nation. If it will make your business more efficient, competitive, productive or profitable, you'll find it here.

12:00 noon
ARBORBUCKS DRAWING - Demonstration Area 1

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

2:00 pm
ARBORBUCKS DRAWING - Demonstration Area 1

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

4:00 pm
TRADE SHOW CLOSES

4:00-5:00 pm
DEVELOPING PRUNING SPECIFICATIONS USING A300

Ed Gilman

If you are asked to bid on a pruning job and there are no pruning specifications other than vague inferences, how can you possibly know what the client wants done to the trees? The answer is, you cannot know. The client probably doesn't know either. This is why specifications are so vital to the future of our industry, for without them we can't move our profession forward.

4:00-5:00 pm
KEEPING YOUR EMPLOYEES

Drawn from a survey, the strategies and techniques that work best to keep employees in the tree care company will be shared. This in-depth look will show how to increase retention of these key assets. It will provide information on the benefits, compensation, and other things required to stabilize and keep top employees. This seminar will also provide tips and tools to create a motivational environment for all levels of employees.

6:00-7:00 pm
WELCOME RECEPTION FOR ALL ATTENDEES AND EXHIBITORS - Union Station; Crown Plaza at Union Station

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

---

Friday, November 5, 1999

7:30 am
REGISTRATION OPENS - Complimentary coffee available

8:00-9:00 am
TOP INSECT PESTS & CONTROL

This presentation will focus on new strategies for scale control as well as some of the new alternates. If you're not new to the world of pests, it might be time to rethink your approach.

8:00-9:00 am
ACCOUNTING: TALKING THE LANGUAGE OF ACCOUNTANTS

When you're dealing with accounting matters, you need to understand the language of accountants. Creditors, bankers, and other financiers speak their own language. You need to be proficient with it. So how come you're not putting your money where your mouth is?

9:00 am
TRADE SHOW OPENS

Plan on an information-packed day of demonstrations, browsing, test drives and other things required to make them structural. Plus, we've arranged for live demonstrations and plenty of hands-on opportunities with some of the leading names in the arborist industry. Check your show program for times and locations. To keep up with the industry, you won't want to miss a single demo.

9:30-10:30 am
BEYOND DEADWOODING

This seminar will help you become more efficient at pruning trees, and will provide you with a step-by-step method for evaluating trees and for evaluating good tree work. You will learn which branches and stems to remove from trees in order to make them structurally sound and aesthetically pleasing.

12:00 noon
ARBORBUCKS DRAWING - As of yet, no details have been provided.

Be sure to fill out your entry form and you could be the winner of ARBORBUCKS currency.

2:00 pm
ARBORBUCKS DRAWING - Demonstration Area 1

It's not too late to enter the drawing.

4:00 pm
TRADE SHOW CLOSES

4:00-5:00 pm
MYCORRHIZAL FUNGI AND RHIZOBACTERIA

Mycorrhizal fungi can increase the tolerance of their plant hosts to drought, extremes of soil pH, low fertility, certain root diseases and other stresses. Rhizobacteria can promote plant growth and other external benefits.

4:00-5:00 pm
BASIC OFFICE COMPUTERIZATION

This program is repeated from Friday at 9:30 am. See above.

5:15-6:15 pm
USING THE INTERNET TO ENHANCE BUSINESS

John Lloyd

Although access to the Internet has become almost necessary in today's homes and businesses, the potential for its use as a business tool is probably not as well understood as it should be.
Saturday, November 6, 1999

REGISTRATION OPENS - Complimentary coffee available

8:00-9:00 MYCORRHIZAL FUNGI AND OTHER MICROORGANISMS
Don Marx
(This program is repeated from Friday. See Friday’s seminar schedule)

8:00-9:00 TOP DISEASES & CONTROL STRATEGIES - Paul Pecknold
This presentation will focus on the pathological problems of Pecknold’s personal list of “the 10 best/10 worst” shade and ornamental trees in the Midwest. He’ll cover anthracnoses, apple scab, blister leaf of oak, verticillium wilt, aggressive canker diseases and more.

9:00 TRADE SHOW OPENS
This is your last day to see and learn about everything you need to keep your business moving. Be sure to take advantage of all TCI EXPO ’99 has to offer!

9:30-10:30 CABLING & BRACING/APPLICATIONS FOR THE COBRA SYSTEM - John Ball
With almost all technological advances, there are advantages and disadvantages. Ball, a former commercial arborist and researcher at South Dakota State University, will be sharing some preliminary research results on the Cobra System, discussing when and where it can be used successfully, as well as informing the audience what questions he has regarding the system and how they are being addressed.

9:30-10:30 GENERATIONAL WARFARE & EMPLOYEE RELATIONS
John Curtis
Don’t let the proverbial generation gap come between you and effective hiring and employee development. Trying to understand the impact of graying Baby Boomers, Generation X and the Baby Boomlet on the workforce can be confusing, especially when you manage an age diverse population. But one thing is clear... each generation has a powerful influence on every aspect of our society. Listen to this dynamic presentation from John Curtis with Integrated Organizational Development, Inc., a business consulting firm in Maitland, Florida specializing in Organizational Assessment, Strategic Planning, and Human Skills Development.

11:00 ARBORBUCKS DRAWING - Demonstration Area 3
It’s not too late too enter the drawing. You could be the winner!

12:30 ISA Certification Exam Check-in

1:00 ARBORBUCKS DRAWING - Demonstration Area 3
This is your last chance to win! See you in the demo area.

1:00 ISA Certification Exam
To sit for the exam, you must call ISA to preregister at 1-217-355-9411.
Application and registration fee must be received at ISA 12 working days prior to exam date.

3:00 TCI EXPO ’99 REGISTRATION AND TRADE SHOW CLOSE!

See you next year in Charlotte, NC - November 9-11, 2000
**Driving Is Easy ...**

**FROM: THE NORTH -**
Chicago - Route I-65S
Take I-65 South to Exit 114. Go south on Dr. Martin Luther King Jr. Drive/West Street to Maryland Street. Take a left onto Maryland Street. The Indiana Convention Center will be on the right.

**FROM: THE SOUTH -**
Louisville - Route I-65N
Take I-65 North to I-70 West to Exit 79A. Go North on West Street/Missouri Street. Take a right onto Maryland Street. The Indiana Convention Center will be on the right.

**FROM: THE EAST -**
Ohio - Route I-70W
Take I-70 West to I-65 North Exit 114. Go South on Martin Luther King Jr. Drive/West Street to Maryland Street. Take a left onto Maryland Street. The Indiana Convention Center will be on the right.

**FROM: THE WEST -**
Illinois - Route I-70E
Take I-70 East to Exit 79A. Go North on West Street/Missouri Street to Maryland Street. Take a right onto Maryland Street. The Indiana Convention Center will be on the right.

**FROM: THE NORTHEAST -**
Ft. Wayne, Detroit - I-69S
Take I-69 South to I-465 South to I-70 West to I-65 North to Exit 114. Go South on Martin Luther King Jr. Drive/West Street to Maryland Street. Take a left onto Maryland Street. The Indiana Convention Center will be on the right.

**FROM: THE SOUTHEAST -**
Cincinnati - I-74W
Take I-74 West to I-465 South to I-65 North to I-70 West to Exit 79A. Go North on West Street/Missouri Street. Take a right onto Maryland Street. The Indiana Convention Center will be on the right.

**Train ...**

AMTRAK's Indianapolis Station is located next door to historic Union Station, just two blocks from the Convention Center. Check AMTRAK reservations for train schedules at 1-800-872-7245.

**Flying ...**

US Airways
US Airways has been selected as the primary airline for TCI EXPO '99. It is offering special discounted fares to TCI EXPO meeting attendees. To make your reservation, call US Airways Meeting and Convention Reservation Center at 1-800-334-8644 and reference the National Arborist Association's Gold File #19611030.

Northwest/KLM Airlines
Northwest/KLM Airlines has been selected as the alternate air carrier. Special discounts have been arranged on your air transportation. To take advantage of this special offer, please call Meeting Services Reservation Desk at 1-800-328-1111 and refer to WorldFile #NMNB7. Following these instructions will ensure you receive the best possible price on your ticket.

**Airport Transportation ...**

For those arriving by air, the Indianapolis International Airport is 12 minutes from downtown Indy. Arrangements have been made with INDY CONNECTIONS shuttle service for transportation to downtown hotels. Look for coupons in your registration confirmation packages. This coupon will entitle you to a conference rate of $7.00 per person, one way.

Once in the airport, please go downstairs to the baggage area and claim your luggage. Proceed out the terminal exit doors and follow the signs directing you to the "Ground Transportation Center." The Center is located directly across the street from the terminal on the ground level of the parking garage.

Go inside the Ground Transportation Center to the first counter marked INDY CONNECTIONS and let the representative know you have arrived. You must present your coupon to the representative at this time to receive the reduced rate.
This year the host hotel for TCI EXPO '99 is the OMNI SEVERIN HOTEL, located at 40 West Jackson Place (one block from the Convention Center). The OMNI SEVERIN HOTEL is offering TCI EXPO '99 attendees a rate of $90 single/double occupancy.

Valet parking is available for overnight hotel guests at a daily rate of $12. This includes in-and-out privileges on a 24-hour basis. Currently, Omni Severin Hotel guests may park in the Pan Am Plaza Garage for $6 per day. This does not include in-and-out privileges. Space is limited, be sure to make your reservation early. This rate will be offered until October 3, 1999. To make your reservation, please call the OMNI SEVERIN HOTEL at 317-634-6664. Be sure to reference the National Arborist Association/TCI EXPO room block when making your reservations.

Alternative accommodations are available at the CROWNE PLAZA at Union Station, located at 123 West Louisiana Street (adjacent to the Convention Center). The Crowne Plaza at Union Station will offer TCI EXPO '99 attendees a rate of $90 single/double occupancy.

Valet parking is available for overnight hotel guests at a daily rate of $10. This includes in-and-out privileges on a 24-hour basis. Crowne Plaza hotel guests may self park in the Pan Am Plaza Garage at a discounted rate. Reservations must be made by October 4, 1999 in order to guarantee this preferred rate. To reserve your room, please call the hotel at 317-631-2221 and be sure to reference the National Arborist Association/TCI EXPO room block.
## Schedule at a Glance

### Thursday, November 4
- **7:30 am**: Registration Opens
- **8:30 - 9:45 am**: Keynote Address
  - Staffing: Key to Success Now and in the Coming Years - Wayne Outlaw
- **9:57 am**: Trade Show Opens

### Friday, November 5
- **7:30 am**: Registration Opens
- **8:00 - 9:00 am**: Top Insect Pests & Control Strategies
  - Cliff Sadof
- **8:00 - 9:00 am**: Accounting: Talking the Talk - Mary McVicker
- **9:00 am**: Trade Show Opens
- **9:30 - 10:30 am**: Beyond Deadwooding
  - Ed Gilman
- **9:30 - 10:30 am**: Basic Office Computerization
  - Jack Mattingly

### Saturday, November 6
- **7:30 am**: Registration Opens
- **8:00 - 9:00 am**: Mycorrhizal Fungi and Other Microorganisms
  - Don Marx
- **8:00 - 9:00 am**: Top Diseases & Control Strategies
  - Paul Pecknold
- **9:00 am**: Trade Show Opens
- **9:30 - 10:30 am**: Cabling & Bracing/ Applications for the Cobra System
  - John Ball
- **9:30 - 10:30 am**: Generational Warfare & Employee Relations
  - John Curtis

### Schedule Highlights
- **Arborbucks Drawing**: 12:00, 2:00, 4:00, 6:00 - 7:00
- **Trade Show Closes**: 4:00
- **Registration Closes**: 4:00
- **Welcome Reception for all Attendees and Exhibitors**: 6:00 - 7:00
- **12:00PM ISA Certification Exam Check-In**: 1:00
- **1:00PM ISA Certification Exam**: 3:00
- **3:00PM TCI EXPO '99 Registration and Trade Show Close**: 4:00
- **4:00PM Developing Pruning Specifications Using A300**: 4:00
- **4:00PM Mycorrhizal Fungi and Other Microorganisms**: 4:00
- **4:00PM Basic Office Computerization**: 4:00
- **5:15 - 6:15PM Trade Show Opens**: 4:00
- **5:15 - 6:15PM Using the Internet to Enhance Your Customer Service**: 4:00
- **5:15 - 6:15PM Registration and Trade Show Close**: 4:00
- **6:00 - 7:00PM Welcome Reception for all Attendees and Exhibitors**: 6:00 - 7:00

### Registration
- Early Bird registrations must be received by October 8, 1999. Registrations received after October 8, 1999, not complying with the appropriate fees, will be billed accordingly. Registration IS REQUIRED to obtain your admission badge. Everyone is required to wear a badge issued by the National Arborist Association to enter the exhibit hall and all seminars.

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

### Gold Card
- If you are attending 5 or more seminars, BUY GOLD! To purchase the GOLD CARD, which will give you unlimited access to all educational sessions and the Trade Show, check the appropriate box on the registration form and enter the correct amount in the TOTAL COST line.

### Cancellations
- All registration cancellations must be received in writing at the National Arborist Association office. Cancellations received on or before October 22, 1999, will receive a full refund less a $25 administrative fee. Fees cannot be refunded after October 22, however you are welcome to send a replacement. No telephone cancellations will be accepted.

### Avoid Long Lines!
- Don't want to wait? Indicate on your registration form that you would like your badge mailed in advance. When you arrive at the show, go to the "Badge Holder Pickup" desk to get your badge holder and pocket program. That's all you need to do to...

### Use One Form for Each Registrant!
- Reproduce registration form for additional registrants.
1. Registration Form

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

FOR OFFICE USE ONLY
$ ____________ REC'D
CK# ____________ REF. ____________

☐ Please check here if you require special accommodations to fully participate. Attach a written description of your needs.

2. Seminar Selections

THURSDAY, NOVEMBER 4
☐ #1 - 8:30am Staffing: Key to Success Now and in the Coming Years .......... 1 Hour
☐ #2 - 4:00pm Developing Pruning Specifications Using A300 .................... 1 Hour

FRIDAY, NOVEMBER 5
☐ #4 - 8:00am Top Insect Pests & Control Strategies ........................................ 0 Hour
☐ #5 - 8:00am Accounting: Talking the Talk .................................................. 1 Hour
☐ #6 - 9:30am Beyond Deadwooding ............................................................... 1 Hour
☐ #7 - 9:30am Basic Office Computerization .................................................. 1 Hour
☐ #8 - 4:00pm Mycorrhizal Fungi and Other Microorganisms ..................... 1 Hour
☐ #9 - 4:00pm Basic Office Computerization .................................................. 1 Hour
☐ #10 - 5:15pm Using the Internet to Enhance Your Customer Service ............ 1 Hour

SATURDAY, NOVEMBER 6
☐ #11 - 8:00am Mycorrhizal Fungi and Other Microorganisms ..................... 1 Hour
☐ #12 - 8:00am Top Diseases & Control Strategies ......................................... 0 Hour
☐ #13 - 9:30am Cabling & Bracing/Applications for the Cobra System .......... 1 Hour
☐ #14 - 9:30am Generational Warfare & Employee Relations ....................... 1 Hour

TOTAL SEMINAR HOURS ___________

3. Badge Request

☐ Please check here if you would like your badge mailed in advance.

4. Registration Options

☐ Gold Card - includes any 8 seminar selections and admission to trade show
(Wednesday Business Managers' Workshop is not included in Gold Card option)
BEFORE OCT. 8, 1999 $195
AFTER OCT. 8, 1999 $240

☐ Individual Seminars multiply cost by number of seminar hours ___ X $ 45 $ 55

☐ Trade Show Entrance Only - Free with paid seminars
$ 10 $ 15

☐ Business Managers' Workshop (lunch not included) - Wednesday, Nov. 3, 1999
$ 95 $ 95

TOTAL $ ____________

5. Payment Method

☐ Check Enclosed ☐ MasterCard/Visa AMOUNT $ ____________
CARD NO. ____________ EXP. DATE ____________
NAME ____________________________ SIGNATURE ____________
(as it appears on your card)

6. NAA Membership & TCI Magazine Information

1. Is your company an NAA Member Firm? ☐ Yes ☐ No
2. Do you wish to receive NAA Membership Info? ☐ Yes ☐ No
3. Do you wish to receive a complimentary subscription to TREE CARE INDUSTRY (TCI) Magazine? ☐ Yes ☐ No
4. Business/Industry: (Please check one that applies) ☐ Tree Service ☐ Property Mgmt. ☐ Consulting Firm
☐ Landscape Contractor ☐ Utility ☐ Governmental Entity
☐ School/University ☐ Other: ____________________________
5. Purchasing Authority: (please check one that applies) ☐ Approve ☐ Recommend
Charlotte, North Carolina

TCI EXPO 2000
November 9-11

Success is in your hands ...

Make a difference in your future!

National Arborist Association, Inc.
PO Box 1094
The Meeting Place Mall, Route 101
Amherst, NH 03031-1094