Here's why Disc Chipper users are going back to Drum Chippers.

More Dumping Fees.
More Repair Costs.
More Downtime.
More Fuel Consumption.
More Overheating.

Do you need to chip everything?

If you're like most disc owners, you've been chipping more of what was once sold as firewood (or left for people to take), and have watched your dumping fees go up and your productivity go down. Your crews spend more time running to the dump, clearing jammed chutes, washing down radiator screens and waiting for overheated engines to cool.

The Asplundh Whisper Chipper not only offers lower operating costs, but extremely low life cycle costs. And, how many used disc chippers have you seen for sale after ten years of service?

Are you spending more on fuel?

At 70- to 120-feet per minute, it takes a disc chipper almost three times longer than a Whisper Chipper to chip six-inch material. How much more fuel do you think it uses? And, with the engine running longer, you're looking at shorter engine life and, again, higher operating costs.

The Asplundh Whisper Chipper saves time, fuel, and, most important, money.

Are you paying hydraulic mechanics more?

The chart below compares replacement parts for a Whisper Chipper with those of a popular disc chipper.

<table>
<thead>
<tr>
<th>Whisper Chipper</th>
<th>Disc Chipper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blades</td>
<td>Blades</td>
</tr>
<tr>
<td>Belts</td>
<td>Belts</td>
</tr>
<tr>
<td>Cutter Bar</td>
<td>Anvil</td>
</tr>
<tr>
<td>Hydraulic System</td>
<td>Hydraulic tubes, fittings, hoses, motors, filters, tanks, flow dividers, O-rings, seals, (over 30 hydraulic components alone)</td>
</tr>
<tr>
<td>Feed System</td>
<td>Feed wheels, feed teeth, bearings, bushings, feed wheel springs, feed wheel yokes, etc., etc.</td>
</tr>
</tbody>
</table>

Whisper Chippers have far less downtime. That translates into more time making money and less spending it.

Are you ready to think about a drum chipper?

The Whisper – designed, built, used and backed by Asplundh – carries a one-year warranty honored by the most extensive service in the industry. Plus, with full-sized Whispers starting at $8950, you'll keep your investment at its lowest and your yield at its highest.

Come back to the Asplundh Whisper Chipper . . . the chipper that keeps paying dividends for up to 20 years.

Asplundh Ability. See it in action.

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COVER PHOTO:
Tall elms line a street in Hanover, New Hampshire, a Tree City USA community since 1979. (Photo by Mary K. Reynolds)
For the past six weeks I have been visiting and talking with tree service company owners all over the country. I am finding tremendous optimism and confidence out there. The phones are ringing. Sales are moving right along. Some places even boast an abundance of personnel for the field force.

Still, there are a few cynics who are convinced the world is coming to an end. In the best of times these folks find something to complain about, even if it's a shortage of parking places at the bank.

In my opinion, the tree care industry is on the leading edge of some outstanding opportunities. Given the decline in travel and the slump in the real estate market, more people are interested in enhancing their property. We know that an attractive well maintained landscape can add as much as 20% to the value of a property. There couldn't be a better time to convince your marketplace to spend some money on caring for their trees.

The president's America the Beautiful program presents another opportunity. The program requires that every state set up an urban forestry council to make recommendations on how available federal funding should be spent on trees. Every one of those councils should include a commercial arborist. I guarantee you that there will be several council members promoting tree planting, which is fine. If you or a member of your state arborist group were on that state council, you could help divert some of that funding to the care of existing trees. Unless these state councils are made aware of the needs and the benefits of protecting and preserving existing trees, all of the funding will go to the installation and maintenance of new plantings.

If we can have the input, we can reap the rewards. Don't wait for someone else to do it or it isn't going to happen.

Do you know what luck is? Luck is meeting opportunity with preparedness. The opportunities are there. Are you prepared?

Speaking of opportunities, don't miss the opportunity to attend TCI Expo 91 in Columbus, Ohio. See the article on page 30 for more information on this premiere trade show and educational meeting.
Two proven ways to control tree insects without harming the environment

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Inject-A-Cide® B

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Tree City, USA
Cincinnati Serves As A Model For Other Communities

By Steve Sandfort and Wayne Brinkman

Prior to 1982, Cincinnati, Ohio, was taking care of its street trees in much the same way that many cities still do today: crisis management removals and few, if any, plantings. A recent survey by the American Forestry Association showed that the cities surveyed were removing four trees for every one planted.

Since then, the picture in Cincinnati has improved. The street tree forest is under professional management following a 20-year cycle. A new budget was developed and has been doubled. More than four trees have been planted for each one removed (during 1990 the ratio was close to 8:1). All street trees more than six inches in diameter are under a 10-year preventive maintenance cycle. All street trees smaller than six inches are under a 5-year pruning and fertilizing cycle. A 24-hour-per-day emergency response resolves tree-down complaints immediately and written service requests within four weeks, with almost no backlog at year's end. Cincinnati has been recognized for 10 consecutive years by the National Arbor Day Foundation as a Tree City, USA.

Cincinnati, located in the southwest corner of Ohio, celebrated its Bicentennial in 1988. The city's 364,000 people live along 1000 miles of streets within the 88 square miles comprising our scenic seven hills. Cincinnati is bordered by the Ohio River and Kentucky on the south and numerous townships, villages and cities on all other sides. In fact, completely surrounded by Cincinnati are three independent cities, Norwood, St. Bernard and Elmwood Place, each with its own elected officials, police forces, etc. The construction of new subdivisions and industrial parks is rare.

Street tree inventories conducted in 1980 showed a total of 50,000 street trees, about 6000 of which were too dangerous to keep by the roads. This average of 50 street trees per mile indicated that another 100 trees per mile should be planted to make Cincinnati as attractive as nearby villages such as Wyoming with its 100 trees per mile, Mariemont with 150 and Terrace Park with 280.

In 1976 concerned citizens, especially members of the Greater Cincinnati Tree Council, complained to the mayor that many street trees were being indiscriminately removed, almost no new trees were being planted and there was no professionally guided forestry program to reverse these trends. They pointed out that Cincinnati was the only major city in Ohio without a forestry program.

Mayor Bobbie Sterne appointed a 20-member Mayor's Committee for Urban Greenery and charged it with securing enough federal funding to conduct a demonstration program, creating the management plan and ordinances necessary for a permanent program and establishing a method, other than the general fund and federal dollars, to pay for the program in the future.

The efforts were successful. The program was adopted unanimously by the City Council in 1980 and began its assessment-funded work in the fall of 1982. The permanent, professionally guided program was based on several fundamental principles:

1. There would be maximum citizen involvement;
2. Management would be by neighborhoods (what rural foresters call...
management units) rather than by individual trees and street addresses;
3. Funding would be based on a special front foot assessment;
4. The program would be most cost-effective by having a small professional staff planning and administering contracts with private landscape and tree service companies which would accomplish almost 100% of the street tree work.

Citizen volunteers

Citizen volunteers are involved in every phase of the forestry program and accomplish much work that would otherwise be costly in time and money. Volunteers serve four-year terms on a nine-member, city-manager-appointed Urban Forestry Board that helps guide and promote the program and makes recommendations to the Board of Park Commissioners, who are also volunteers.

Closer to home, teams of five neighborhood volunteers, called tree boards, serve as official committees of about 50 community councils. Tree board members prune and water newly planted trees, remove or repair vandalized trees, and even investigate incidents of vandalism. They assist the five-member professional staff with taking inventory of street trees in preparation for preventive maintenance, marking dangerous trees for removal and posting each abutting property with an informative notice. To prepare for planting, tree board members conduct a preliminary survey with the staff and establish a priority list of streets to be planted over the next five years. Then, each year, they help the staff mark some 3000 planting sites and pass out informative literature. Currently, Forestry is committed to planting street trees in 12 communities before planting elsewhere.

In the fall each tree board plants 50, 1-1/2-inch caliper street trees supplied by Forestry. These 600 plantings are immediately followed by Forestry's contractual planting of the remaining 2400 trees.

Volunteers play a crucial role during the bad times, also. When the staff is overwhelmed inspecting trees and limbs down in those neighborhoods most heavily hit by a storm, volunteers often inspect locations in other areas and report to Forestry where tree crews are needed most. Major arterials, dead end streets or roads serving hospitals, fire stations and other emergency services take priority.

Management units

While citizen involvement has proven vital to a good forestry program, so has adopting traditional forest management principles. Our inventories and work accomplishments, other than emergency response, are not carried out on an individual tree-by-street-address basis. As is the case with the U.S. Forest Service, state forest agencies and industrial forest land companies, we find it more logical and cost-effective to manage our trees by large groups. Commonly called timber stands or management units in the rural areas, our groups are called communities.

Cincinnati is divided into 50 communities ranging in size from three miles of street to 70 miles. The street trees in each have their own unique character and needs, as do the people living there. Each community's tree board works closely with city leaders to develop annual budgets and work plans, and assists Forestry in developing a management plan. These individual plans are blended into a long-term plan for the city and serve as guidelines for periodic work in each management unit.

The 50 neighborhoods were ranked according to the number of dangerous trees per street mile as shown by inventories developed in 1980. Street tree preventive maintenance began in the most dangerous neighborhoods in 1982 and is now operating on a 10-year cycle toward the least dangerous communities. Another round of inventories to establish a second 10-year preventive maintenance cycle is planned for 1992.

In early summer of the year a community is scheduled for preventive maintenance, its tree board helps the Forestry staff inspect each street tree and mark those that must be removed. All others are recorded for a Class I NAA pruning. Stumps are counted. Contracts are awarded in
for the city.

Completing a lot of work during
the off-season in a compact manage-
ment unit has proven to be profitable
for the contractor and cost-effective
during the off-season in a compact manage-
ment unit has proven to be profitable
dramatically in the neighborhoods
served. The Law Department feels
that our management unit system is
defensible in liability challenges and
the street trees are more attractive,
safer and have had their lives ex-
ended.

At the conclusion of the preventive
maintenance work, stumps are re-
moved by a separate contractor.
Usually, twice as many stumps are
removed as there were trees removed
since stumps are created by
emergency, private and utility com-
pany requests for removals.

Grass seed is sown as part of this work, so
the stump removal contract is sched-
uled during the proper time to seed
lawns.

The Urban Forestry Board period-
ically asks communities if they want
to cooperate on a comprehensive
planting program. In 1982, eight of
50 communities (16%) responded
positively to the board's letter. In
1988, when every plantable street in
those eight had been planted, 12 of
42 (28.6%) leaped at the chance.

Tree board volunteers in each co-
operating community help the staff
survey the planting needs along each
street that has a tree lawn width
greater than three feet. An appro-
priate species and the approximate
number of each street is listed and re-
corded on maps. The goal is to allow
no species to comprise more than 5%
of the total street tree population.
However, one species is chosen for a
street or small groups of streets that
have other similar characteristics.
This simplifies planting and future
maintenance.

Once the survey is completed,
each tree board develops a priority
list of streets to be planted each year
for the next five years. In January,
Forestry notifies the communities of
the planting budget for the following
fall. The tree boards refer to their
plan then submit a list of streets they
want to include in the year's planting
contract. When all community re-
quests are received, Forestry checks
with every utility and city agency to
learn of major street construction
projects scheduled for the fall so
planting in those locations can be
postponed. Contracts are awarded in
June and the successful contractor,
Forestry and the street boards refer to their
landscape company. This is repeated
in five years and then the trees are
put on a 10-year cycle.

### Funding

The city must keep track of
110,000 parcels to fund Forestry.
Revenue is derived from a special as-
seessment on property to care for
street trees, as authorized by Section
727.01 of the Ohio Revised Code.

In 1980 the City Council estab-
lished the entire corporate limits as a
special street tree maintenance dis-
trict. The city then paid the Hamilton
County Auditor's Office and Com-
puter Division to measure the front
footage of each parcel and create a
computer file which could be used to
calculate the amount to be billed
each year. This was a massive under-
taking since the front footage had
never been measured. Each year the
files must be updated as property is
sold, subdivided or consolidated, or
streets are added. These costs are
paid for by the assessment, including
the start-up costs.

Each year the City Council must
pass by a three-fourths majority an
ordinance of necessity and then a
levying ordinance establishing the as-
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assment rate and work plan for the following year. Once this is done, the city certifies to the county what to charge each of the 111,000 properties with front footage on the December tax bill. Front footage is defined as the linear distance of each property that abuts an accepted public right-of-way. Usually this is the width of the lot on the street in front; corner lots are assessed on both sides. Tax-exempt properties such as those owned by churches and governments also must help fund tree work.

About a dozen cities in Ohio are funding street tree work with this assessment, which was implemented by the state Legislature about 60 years ago. Currently, Cincinnati’s assessment rate is 10 cents per foot for trees (it is at least 50 cents per foot for decorative boulevard lights) which generates about $1.05 million annually along our 1000 miles of street. The average property owner pays $10 per year for street trees.

Contracting

a. The rationale

Prior to 1982, the city’s Highway Maintenance Department employed two, three-person, fully equipped tree crews that responded to street tree emergencies and complaints. As it does now, the Park Department had its own in-house tree crews. When Forestry was formed to care for street trees, the Highway Maintenance equipment was getting old and workers were needed for other duties. Thus, Forestry was free to try in-house or contracted crews. The Mayor’s Committee for Urban Greenery considered the matter and decided to follow the lead of the logging and utility industries and try contracting.

By contracting, the city could hire crews only when needed. Also, contractors have to comply with federal and insurance safety standards and would supervise work crews.

Other advantages were that the city would not have to pay for work not done to standards and property damages would probably be less since the contractors would be financially responsible.

Another key benefit was that if contracting did not work, it would be easy to hire and equip in-house crews, but not vice-versa.

After 10 years, contracting has been successful. Each good contractor is like a breath of fresh air. The staff learns new work methods and management techniques, sees different equipment, makes new friends and it professionally enhanced. Most important, our work is cost-effective since contractors are motivated by profit. In fact, a study on the city’s infrastructure done in 1987 by a group of local business people concluded that Cincinnati was getting more street tree work done for the dollar than any of the other cities they studied and that this was mostly due to contracting.

Over the years, Forestry has worked with all types of contractors, ranging from large well-known companies to three brothers who left their equipment near the job, rode their motorcycle to the city each day, did a marvelous job, then rode home at night to play in their country-western band. Large companies have ground stumps, as has a local one-man operation. That same man has dug tree planting holes with his stump machine for the city and as a sub-contractor to local nurseries. The landscape contractors have usually been smaller, local companies, some with their own nurseries. Apparently, all have been satisfied with their contracts since they have continued to bid on new work and have had numerous contracts.

Write to us at the address shown at the end of this article for copies of contract specifications.

Most of Forestry’s contracts have several things in common:

1. Forestry writes the detailed specifications and the Purchasing Department bids and awards the contract to the lowest, acceptable and qualified bidder.

2. Bidders can be disqualified for not having favorable references or a good track record with other city agencies, by submitting prices that are unrealistically low or not being able to supply a 100% performance surety, liability insurance and/or state workers compensation.

3. All of Forestry’s work—tree planting, pruning, removal and stump grinding—has been legally de-
fined as maintenance, not construction. Therefore, union prevailing wages, which apply to most construction projects, do not apply and our contractors may pay what they normally do on private jobs.

4. All tree work conforms to NAA technical standards and ANSI Z133.1 Safety Standards, while tree planting conforms to ANSI Z60.1 (AAN Nursery Stock Standards.)

5. All contractors must call Forestry the morning of each work day to report on what street or work order they will be servicing that day.

6. While working for Forestry, each contractor must put a sign on both sides of each piece of equipment and leave an information sheet at each house explaining the job. The signs, which state “Under Contract to Urban Forestry” and give our phone number, and the information sheets are provided by Forestry.

7. Liquidated damages are deducted for violations. For example, these might be $100 per day for each day the job is late in completion; $5 per day for each tree planting hole left open; and $10 per day if the contractor does not notify Forestry of the work location.

8. Contractors may bill the city only after all work on a street is completed, has been inspected by a staff member with the contractor and all corrections are satisfactorily made.

9. Almost all work is paid on the unit price, not an hourly rate. This makes the contractor responsible for production and keeps the staff concentrating on the quality of the work rather than hours spent. The staff can also better answer complaints that the city is paying a contractor to work on private property since the city pays for only public trees planted or worked on and the contractor is free to do a private job if he feels time permits.

10. The city holds 10% of each invoice as a retainer until the end of the contract in case damages occur that the contractor is reluctant to repair, several trees die and are not replaced, liquidated damages must be deducted, etc. When everything is proper and the contract is about to be closed, the final invoice is for the retainer held from all other invoices.

b. Emergencies

On big tree work, contracts are awarded for a renewable second year at the same prices unless one party withdraws at the end of the first year. Forestry receives written requests to work on street trees, inspects the trees, writes a work order and gives it to the contractor. The contractor must certify in writing that his company is qualified as a Z133.1 line clearing tree trimmer and may work around energized wires. The contractor also schedules his work citywide based on available labor and equipment and other work in the area.

Trees are either safety pruned or removed and a unit price per size class (10-inch diameter classes) is paid upon completion. All wood is stacked between the curb and walk for anyone to take. Cabling, bracing, fertilizing and other arboricultural work is paid by the hour, with a markup for supplies. About 350 such written requests are received each year involving about 375 removals.

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and 150 prunings. Maximum price per removal is $360. Most requests are resolved in a month, but some less serious ones are postponed until winter. Emergency stump grinding costs $44 per stump, regardless of size.

If Forestry must call the contractor away from unit work or out at night or on weekends to deal with a tree down in the street, then an hourly rate applies. The rate is about $70 per hour based on a two-person fully equipped aerial lift with chipper. About 300 such calls are necessary annually. The contractor must be at the work site within two hours of being called or there is a $50 liquidated damage for each half hour he is late. We have never had to charge this.

These services cost Forestry about $100,000 per year. The contract also allows work on any city-owned property if the controlling agency is willing to pay. This comes to about $50,000 worth of additional work for the contractor.

**c. Planting**

Forestry receives compensation, as calculated by the Council of Tree and Landscape Appraisers Guide for Establishing Values of Trees and Other Plants, for trees damaged or destroyed, and revenues from the sale of firewood and chips and reimbursements from other departments wanting trees planted on their properties. These funds, totalling about $40,000 per year, are spent planting trees citywide. Our landscape contractor has a yearly contract to supply about 10 species of trees in sizes from 1-1/2-inch caliper to 3-1/2-inch caliper, with bid prices for each. These trees are supplied from approved nurseries, planted with water holding polymer, and guaranteed for one year. Unit price per tree ranges from $70 to $295. There are also prices just for planting services when Forestry buys the tree and a price for removing a stump if one is encountered where the replacement tree is needed. The contractor is provided work orders in mid-summer for fall planting and in January for spring planting. A stump grinder or trencher is used to grind holes where Forestry has marked after underground utilities are checked.

One tree species is planted along both sides of the street on about 35-foot centers. More than 20 species are used in the entire planting. One contractor may get all 12 communities scheduled for planting, or only one. The lowest total price per community gets the job. Price per tree is about $100, and payments are made only when all work is completed along a street. If fewer trees can be planted on a street than called for, Forestry designates another street to be planted.

**d. Preventive maintenance**

In the scheduled neighborhoods, all big street trees to be removed are marked in June or July and all other trees are scheduled for a Class I NAA pruning, including elevating for street and road clearance, and clearance to signs, lights and structures. All wood larger than four inches is cut into 18-inch lengths and taken to an all-weather, secure, nearby woodyard and dumped by the contractor. All other debris is chipped, and the chips are also taken...
to the yard. Trees more than six inches in diameter are serviced with unit prices of about $40 per pruning and $100 per removal, regardless of size. There is a small amount of hourly work done to trim wooded rights-of-way for road clearance and private trees that endanger the street. Rates for a two-person manual crew has been about $55 per hour. The contractor plans his own work through the community, must certify himself to be an ANSI Z133.1 line clearing tree trimmer, and is paid for work done along each street only when it is done properly. He leaves informative literature at each house. About four communities are worked on each year, with from one to four contractors getting the work. About 500 removals and 2200 prunings are accomplished during this work that begins November 1 and ends by March 1. Forestry sells firewood and chips to the public to save landfill charges and generate tree planting funds that are used by community tree boards where the work was done.

About 800 stumps between the curb and sidewalk and ranging in size from six inches to more than 50 inches are removed annually from those communities where large tree preventive maintenance was performed. One contractor usually gets this contract for a bid of about $33 per stump, regardless of size. Stumps are ground to 12 inches below the surface, including all surface roots. Grinding debris is packed into the hole to an 8-inch mound, excess debris is hauled to the woodyard, and grass seed, fertilizer and straw are spread to complete the job. Literature is posted at each house asking that the mound not be leveled and that it be watered until the grass grows. The contractor grinds about 50 stumps per day, working from March to September.

Five years after a street is planted with 1-1/2-inch caliper trees, Forestry inspects all trees under six inches in diameter and issues work orders to a landscape contractor. Some trees need a corrective pruning while others need to be fertilized with slow release by the liquid injection method. Some need both. Power tools are not permitted and NAA Standards must be followed. Work is done from October 1 to March 31. Prices are $5 per tree pruned, $4.50 for fertilizing, and $9 for both. Staking costs $10, and the stake is removed after one year. This is a yearly contract which also includes a summer watering, if necessary. Cost is $3 per tree per watering, with 40 gallons applied by soil injection. About 2500 trees are worked on, with about 1000 being watered three times during the summer.

e. Tree purchases

Forestry purchases 600 1-1/2-inch caliper, balled and burlapped trees for volunteer planting in 12 communities to prepare the way for contractual planting. Cost per tree delivered to Cincinnati is about $40. Forestry also purchases 1000 trees for the city’s Spring Re-Leaf project, where families wanting one tree to plant by the street or in their front yard near the street, fill out a coupon published in local papers. These trees cost

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TREE CARE INDUSTRY - MAY 1991
about $35 each, are about 1-inch caliper, and available for individuals to pick up on a Saturday early in April. Left over trees are given to tree boards for volunteer planting in street triangles.

f. Technical services

For three years, Forestry has contracted with ACRT Environmental Services, Inc., to supply two technicians, with at least a 2-year degree in forestry, and a pickup truck with power tailgate, gas and repairs, a chain saw and hand tools. Technicians help inspect and clean up storm damage not severe enough to call out the more expensive tree service contractor, do much of the routine field work, and research property and right-of-way records. If one technician is off, there are separate rates for one person and a truck and overtime rates for evening calls.

Summary

What does the staff do if all the work is done by professional contractors? Planning, developing work and detailed specifications, administering contracts to assure that the quality and quantity of work is proper, monitoring the work of overhead and underground utility agencies, conducting public education, inspecting 400 tree work permits per year, and rendering professional services to other city agencies, all definitely make for a fun, busy time.

Recently, Forestry was transferred from Public Works to the Park Department and is undergoing a reorganization to fit in better with the new greenspace management responsibilities of that department, while also taking over the supervision of the park tree crews.

Steve Sandfort is supervisor of Urban Forestry, Room 425 City Hall, Cincinnati, Ohio 45202.

Wayne Brinkman is a tax consultant, Gold Medal winner in swimming in the World Handicapped Olympics and Chairman of the Urban Forestry Board.

Pros And Cons Of Municipal Contracting

By Peter Gerstenberger

Municipal contracts, though not as profitable as some lines of work, can offer advantages to the company that does its homework. Here are some pointers to think about before you bid.

Know your costs

A federal law known as the Davis-Bacon Act requires that prevailing wages be paid on all federally funded construction work. Every state has what is known as a “mini Davis-Bacon law.” Prospective contractors should understand how these laws apply to contracted tree work because they can drastically change labor and associated costs.

Consider your capital investment at the onset of the contract period. As a rule of thumb, don’t purchase any piece of equipment unless you expect to operate it more than 1000 hours annually. Consider short-term leases for extra bucket trucks or chippers or sub-contracting tasks like stump grinding to someone who is established in that area.

Know your rights

Ideally, specifications for the contract work and minimum requirements for the contractor should be spelled out in the bid proposal. Often, they are not. Based on his experiences, the president of one company suggests asking plenty of questions at pre-bid meetings. You should get a feel for whom you will be working with.

If you lose a contract to a low-ball bid, you may be able to seek an audit of the contractor’s payroll after the fact. If successful, the most you can hope to accomplish is to prevent that contractor from bidding low a second time.

Don’t forsake clients

In most cases, municipal contracts should be looked upon as a means of augmenting your existing work and/or growing your company.

One firm, after years of steady growth in residential work, went from doing 100% residential work in 1989 to doing 100% municipal and utility contracting in 1990. “We took a beating,” the owner says. The firm increased its gross sales by 15% in its first year of contract work, but it also doubled its payroll and associated costs. To make matters worse, the owner deliberately low bid the work, seeking to get established with the clients. The move hurt not only profits, but cash flow.

Abiding by the specs

Many contractors, unfamiliar with municipal work, dislike the strict contract specifications that seemingly de-emphasize the importance of the tree. Sadly in some cases, municipal tree programs are administered by people who don’t understand trees. Improving the overall care of the trees in these cases is a matter of educating town officials and getting increased tree care budgets, a process in which the contractor can have a role.

Consider your schedule

Municipal contracts can augment a company’s other work and provide steady year-round work for valued employees, if the contract allows work to be done during slow times. The experience with municipal winter work can give your crews the desire to work in the winter.

Contract work such as removals may provide the opportunity to hone skills, improve efficiency and allow you to purchase equipment, all of which may prove valuable to your residential work.

Seek advice from your peers

Talk to people, especially former or current contractors who aren’t bidding, to get advice. Know who will be responsible for implementing the contract—a reasonable supervisor can smooth the wrinkles and rough edges of a poorly written contract, but a poor supervisor can turn a cream puff contract into a nightmare.
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Clarification

In your February issue of Tree Care Industry you show a picture and caption of our Brontosaurus brush cutting machine. The caption describes our machine as a large brush cutter used for non-selective clearing. This statement is simply not true, and I am writing this letter to describe for you and your readers a little about the versatility of the Brontosaurus brush cutting machine.

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Michael W. Brown
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The Cycles Of Life

By Donald F. Blair

Planning for the disposition of your estate might be the most grim, unpleasant thing you will ever have to do. Still, it is something that we as businessmen—regardless of the size of our companies—will have to deal with.

These days, writing a will calls for more than an “I, being of sound mind,” declaration. I suggest contacting your insurance agent and attorney and either work with them or have them recommend an estate planner. Take stock of your business and equipment. Planning your estate is just another step in successful business and personal management.

I think most of us believe that we’ve got plenty of time to get our affairs in order, but do we? Have you prepared a will? Do you have burial wishes set down? Do you have enough life insurance to provide for your survivors or at the very least, leave your survivors debt-free?

Some people think they don’t have enough property to constitute an “estate.” But if you’ve got a favorite fishing rod you want your nephew to have, or if you want the guys to crack a bottle of Rebel Yell in your memory at a meeting, or if you want a few bucks to go to the National Arborist Foundation or the ISA Research Trust, you’ve got an estate. And if your wishes aren’t in writing, they aren’t going to happen.

Life is short. How short was painless demonstrated to me on March 13. I attended the funeral of Michael Mastrangelo, the chief ranger of the C&O Canal Park District. He probably had the distinction of administering the narrowest and longest park in the national system. One hundred eighty-four miles from Georgetown to Cumberland, Maryland, it is only as wide as its easement for the towpath and canal right-of-way. For a ranger, this was a dream job. Michael was a champion pistol shot, an avid collector of baseball memorabilia and a loving husband and father of three young children. Park Ranger Mastrangelo was 42 years old.

Attending his funeral made me think of several things that I feel are important enough to share. The service and burial were a fitting honor to a man such as Michael. At least 100 uniformed rangers and 50 uniformed members of local, state and federal law enforcement agencies attended, their badges shrouded in black mourning ribbon. Seventy-four official vehicles with lights flashing were in the cortege. Elder members of the American Legion stood at attention near the grave. The rangers and police officers stood in formation. A military honor guard bore the casket and performed the solemn and elegant ritual of folding the flag that draped the casket. The sergeant of the guard presented the flag to the widow. Three volleys pierced the heavens that another soldier was on his way. Standing in the cold wind and blowing snow, I was impressed with the professionalism of the rangers, policemen and soldiers. I was honored for the widow by the dignity and ceremony that these professionals brought to the services. I noticed a large bouquet of flowers from the Fraternal Order of Police.

Some personal thoughts

As I left the cemetery I thought about a hypothetical funeral for an arborist. His family and friends would be there. If he had served in the military, there would be an honor guard. But there is no FOA (Fraternal Order of Arborists) to send flowers to the bereaved. We don’t have a universal arborist uniform (unless it’s faded jeans and a dirty T-shirt), so a formation of active tree workers would probably detract more than it would add to a dignified ceremony. As impressive as the ranger 4-wheel drives and pursuit vehicles were, I’m not sure I’d want a line of “Euc Man” trucks following me to the grave. Our image is a worn record but still something to consider. If anybody would be interested in helping to organize the FOA, drop me a line.

The other thing I thought about was that we don’t know how much time we have. Michael Mastrangelo was only a few years older than I and about the same age as many arborists reading this article. If you were to die tomorrow without warning of a massive heart attack as Michael did, or get too close to 12,000 volts as many in our profession do, are your affairs in order?

I’ve got more fun and pressing things to do with my time than to pick out a plot, plan my funeral arrangements and figure out what to do with all my stuff in a will, but I feel it’s a responsibility that I owe my wife and son.

I don’t believe Michael had considered his fate anymore than I had before March 13. I hope somebody out there is moved to make some plans that will save his family a great deal of sorrow and hardship.

Donald F. Blair, president of Sierra Moreno Mercantile Company, Big Pool, Maryland, is an arborist, entrepreneur and teacher.
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Minimum Wage Raised

On April 1, the minimum wage increased to $4.25 per hour. Initially, small businesses—defined in this case as a business with less than $500,000 gross annual income—were intended to be exempt from the bill. But due to a simple technical error, this group is also subject to the higher rate.

Sen. Dale Bumpers (D-Arkansas) introduced Senate Bill 349, and House Resolution 1237 was also introduced to exempt small business. Those bills were not passed at the time of this printing, so the increase in wages is expected to affect all segments of the business community.

Dave Voight, staff member for the U.S. Chamber of Commerce, feels that an exemption for small businesses may occur in the future.

Possible financial implications on the tree care industry may be subtle as wages currently paid by commercial tree firms are already above the new minimum. According to the 1990 National Arborist Association wage survey, the median national wage is $7.50 for a groundperson, $10 for climbers and $11.25 for crew leaders. Of the more than 1000 commercial tree firms that belong to the NAA, 16% responded to the survey.

'Strike Bill' Gaining

Under current law, employees who participate in economic strikes or non-union work stoppages may be permanently replaced, but the proposed "Strike Bill" (H.R.5/S.55) would change that. The proposed legislation would allow two or more employees working in concert to demand unconditional reinstatement after any work stoppage. A concerted activity is defined as two or more employees joining to request or demand changes in wages, benefits or working conditions.

The legislation would also prevent employers from offering permanent jobs to workers called in as replacements during an economic strike or non-union work stoppage. Strikers now are guaranteed immediate reinstatement at the end of an unfair labor practices strike.

Even though employees engaged in economic strikes may be permanently replaced, not all rights to reinstatement are forfeited. Such employees retain preferential rehiring status when their former positions or any other position for which they are qualified become available.

The implications of this bill could be far reaching for both union and non-union employees in the labor negotiating scheme. The bill has 202 cosponsors in the House and 30 cosponsors in the Senate.

The Senate Labor and Human Resources' Labor Subcommittee concluded hearings on March 12.
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"I think it was Mark Twain who said that people define the land and the land defines its people," said New Hampshire's Gov. Judd Gregg in announcing the formation of the Governor's Task Force on Community Trees in New Hampshire. "In New Hampshire, that's always been very true; the land defines the people, defines their culture, defines their way of life. And the quality of the land is, of course, in a large part set by the quality of our trees, especially in our communities."

That was in 1989, when Gregg established the Task Force in cooperation with State Forester Jack Sargent, of the Division of Forests and Lands, Department of Resources and Economic Development; the Cooperative Extension Service; and the Society for the Protection of New Hampshire Forests. Sixteen individuals representing a variety of interdisciplinary expertise were asked to serve on the Task Force. The three cooperating agencies assigned employees to provide technical staff support. Task Force members represented the New Hampshire Association of General Contractors, the New Hampshire Municipal Association, the New Hampshire Association of Public Works Directors, the New Hampshire Plant Growers Association, the state Department of Transportation, a Tree City USA community, a mayor, the New Hampshire Arborists Association, the New Hampshire Landscape Association, the Granite State Landscape Architects Association, a legislator, a tree pathologist, an experienced volunteer coordinator, a community tree warden, and a member of the Garden Club of America.

Community trees are trees in residents' front yards, along streets, on the edge of town, on village greens and commons and wide tree-lined avenues. Community trees are borrowed trees in parks, cities, towns, along streets and in open public spaces. Trees enhance beauty, reduce air pollution, deflect or absorb noise, modify extremes of temperature, protect soil and watersheds, create wildlife habitat, add economic value to towns and cities, provide scenic outdoor spaces for people and provide useful products. The tradition of tree wardens early in the 20th century throughout New England grew out of the need to provide for and care for community trees. In fact, New Hampshire's tree warden legislation was adopted in 1901 and remains as one of the oldest laws in New England. New Hampshire today is the second most heavily forested state in the country—about 87%. But having lots of trees and having lots of safe, healthy and attractive trees in communities are two different matters.

The purpose in establishing the Task Force was to encourage the planting and maintenance of trees in communities, better inform citizens about the value of trees, and foster a heightened appreciation of trees. Task Force members set a goal of making communities, businesses, and residents aware of what they can do with safe, healthy and attractive trees to reduce energy requirements; help fight global warming; contribute to New Hampshire's rural, picturesque setting; benefit wildlife; and conserve soil and water. Working committees were formed to evaluate existing community tree situations and make recommendations relative to several areas: laws, regulations and ordinances; Arbor Day; planting and maintenance; public education and communication; volunteers; and funding.

Task Force activities throughout the yearlong study were many and varied. For example, in 1990 Arbor Day celebrations were more widespread because of the interest and
New Hampshire State Forester Jack Sargent helps schoolchildren plant their sugar maple on Arbor Day.
OSHA Coverage

By Steven Semler

Section 4 of the federal Occupational Safety and Health Administration statute exempts states and municipalities from coverage by federal OSHA. This, however, does not necessarily mean that municipalities' performance of tree care work automatically is exempt from OSHA regulation. The federal OSHA statute permits states to establish their own OSHA "state plans" which displace or supplement federal jurisdiction within that state.

The hook is that many of these "little OSHA" state plans can and do cover public employees. And most of these states simply adopt the federal OSHA regulations as their own. Thus, through this "back door" approach, many municipal employees performing tree work are subject to OSHA regulation even though they are exempt from the federal OSHA statute.

Several states have state plan OSHA that cover public employees, while others have similar plans but do not impose fines or criminal penalties for violations. Still others have proposed creation of state plans, which are pending but appear dormant. These proposed plans presumably would cover state employees if implemented.

As a result for many municipal employers in the tree care industry, OSHA regulation is a reality.

States with state plan OSHA:

State plan OSHA, but no fines or criminal penalties:
Indiana, Maryland, North Carolina, Puerto Rico, Utah.

State plans proposed:
Alabama, Arkansas, Delaware, District of Columbia, Florida, Idaho, Massachusetts, Missouri, Oklahoma, Rhode Island, Texas, West Virginia.

Steven R. Semler is a partner in the Washington, D.C., law firm of Semler & Pritzker, which exclusively represents management with respect to labor law matters. Mr. Semler is labor counsel to NAA and several corporations in the tree care industry.
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AUGUST 11-14, 1991 PHILADELPHIA, PENNSYLVANIA
By Skipper Hammond

Two years ago, Jack Kelly was hired to fill the newly created position of city arborist in Cambridge, Massachusetts. The job description called for someone to develop and direct a comprehensive program of planting and caring for the city’s trees. The job also demands skill in dealing with people.

The hiring board was looking for someone with expertise and enthusiasm, a professional and a politician. That description fits Kelly, who grew up in the area and is at home on Cambridge streets. After serving in the U.S. Marines, he returned to Cambridge and took a temporary job working on the grounds at Harvard University. During his two years there, Kelly “developed a keen interest in the trees and learned by bugging the horticulturist.”

His interest led him to study trees at the University of Massachusetts at Amherst. After graduation, he worked for several years at Frost and Higgins, a major landscape contractor in the Boston area, then returned to Harvard for seven years as an arborist.

In addition to his professional expertise, Kelly brings the energy and charm of his Irish ancestry to the job. “His enthusiasm is catching. Now, when we plant and people come in contact with him, they realize the value of maintenance,” says Mary Kennedy of the Public Planting Committee, which helps residents and businesses get street trees in front of their property.

“He has to negotiate between the extremes in the public, from those who think a tree’s life is sacred to those who think all trees are just a nuisance,” agrees Matthew Foti of Foti Tree Service. “He has the ability to work with all kinds.”

The city’s commitment

The city’s decision to hire an arborist reflected a growing commitment to the urban forest. That commitment, according to Kennedy, now means that trees “don’t have to compete with potholes and playgrounds for the Department of Public Works’ attention. We feel free to plant more trees now because we know there will be follow-up by the city as they mature. And they can be planted in the spring when they should be, even though that’s when street repair makes the heaviest demand on the DPW’s time.”

Kelly, who is a member of the Massachusetts Arborists Association executive board, believes his experience at Harvard prepared him well for his city job. “I learned a lot there about how trees grow in a less-than-desirable location,” he says. “And I learned to look at individual trees, give each one individual attention.”

To assure that each tree in the city gets its share of attention, Kelly started a program of regular maintenance, working tree to tree, street to street. Previously, tree work was catch-up in nature, with crews running to emergencies. Now trees get better care and the city budget gets a break.

His years at Harvard also provided Kelly the opportunity to work with private contractors hired by the university to care for its outstanding urban forest. Kelly’s reputation spread and now professional contractors are more willing to bid for jobs with the city.

Says Foti, one of Kelly’s colleagues...
on the MAA executive board, "Kelly invites bids only from professionals, from those he is confident will do a good job and use safety measures. So nobody turns in a low bid by doing poor work. Everyone is a professional, educated, familiar with the latest developments and methods. So I'm more willing to bid now with these better standards."

Kenneth Greeno, of Greeno Tree Service in nearby Concord, has worked for many years on trees on streets bounding the campus and he can see the improvements that have been made since Kelly has headed the city's program.

"I started to bid for jobs in Cambridge because of Jack. I just finished some work on street trees for Harvard. They were in bad trouble, with brick paving right up to the trunks—no pit at all," Greeno relates. "That wouldn't have happened if Kelly had been there back when they were planted."

Kelly also has changed construction methods. Now, when a tree's roots break a sidewalk, the workers grade the sidewalk rather than hack off the roots. When contractors resurface streets or sidewalks, they no longer scrape off six inches of soil. And when they rebuild sidewalks, they leave a much larger pit. To help them understand why these changes are being made, construction workers attend workshops where they learn how a tree's root systems work.

"Antrim Street will be the test," Kelly says. "Half of it was redone before these new methods were used, half after. In a few years, after the trees have adjusted to having fewer roots, that's when you'll see the effects of street resurfacing. I expect that the end of the street where the soil was scraped away, that's where you'll see fewer and fewer leaves."

Tree climbers and other workers employed by the DPW also receive training. Whenever possible, Kelly schedules them to work alongside a contractor's crew to learn from them. He provides them with literature and home study courses in arboriculture, and he encourages them to attend MAA educational programs. "They can go as far as they want. But you have to enjoy the job to be good at it," he says.

Benefits for the city

Having a professional arborist has "increased our competence a hundred percent," says William Sommers, until recently the city's commissioner of Public Works. "We can deal with complaints better. There's more consistency in the work, and this consistent work reveals needs that hadn't been taken care of, had been forgotten. Contractors have more respect for us (the DPW and Public Planting Committee) because we have a qualified liaison."

While investing in trees might not have an immediate payback, the city's commitment has already drawn several awards. Last year, Cambridge was named a Tree City USA by the Arbor Day Foundation, and the MAA awarded it $60,000 worth of pruning and planting at the wooded park surrounding Fresh Pond, the city's reservoir. In addition, Cambridge workers were the
big winners in tree climbing contests at an Arbor Day celebration. With assistance from the Massachusetts Department of Environmental Management, the city received a large grant from a private donor for tree planting, and it is in line for a grant from Mass ReLeaf, a state planting program supported by contributions and fines against businesses that violate air pollution regulations.

Mass ReLeaf money is reserved for municipalities that show active community involvement and where planting can make a real difference. To qualify for funds, a city or town must have an effective tree program with a designated tree warden, explains Elizabeth Kline of DEM. "Many places just name somebody, anybody," Kline says, "but Kelly is really qualified. He's doing great things and is so enthusiastic."

Trees are important in cities not just for beautification, but also for using up carbon dioxide and for cooling urban hot spots, says Kline. "Trees are important everywhere, but we especially need them where conditions are most resistant to city problems and that do best in the soils of the different neighborhoods. Sommer's expects this survey will be the basis of a comprehensive planting program in the future.

The key to the success of the tree program, according to Kelly, is more community involvement and better understanding of the importance of trees. "Neighborhood involvement is the best safeguard against vandalism," he says. "I like to plant groups of trees, not just isolated individuals. It's more dramatic and the neighborhood takes notice, takes more interest in them." Kelly also tries to increase neighborhood involvement by asking residents to help select the species when the city replaces street trees.

Jim Kelley, of Cambridge Landscape, says Kelly likes to be present when a tree needs help, even if it's not obvious to the people who live there. By pruning before there's a real problem, like a branch down in a storm, his crew doesn't have to be running around for emergencies, and the trees are healthier. Jack is good at showing how pruning can help the tree.

Role of education

Education and involvement with trees begin early in Cambridge. For 20 years, environmental science teacher Kathi Brown has been taking fourth- and fifth-graders on daylong field trips to Fresh Pond, where she teaches them how to find answers to their questions. "If they find a seed and ask where it came from, I tell them to look up at the trees, find the same kind of seed," Brown says.

Brown also emphasizes observational skills to make her students more aware of the environment and how it works. The children use magnifying lenses to look at leaf scars and stethoscopes to listen to the ground under trees.

Kelly hopes this kind of education will increase appreciation for trees and eliminate vandalism. "I want these kids and their kids to be able to walk down tree-shaded sidewalks and know people like themselves are responsible for those trees being there," he says.

"We're reaping the benefits of what our parents and grandparents did. The most important thing I can do is select trees that will assure a forest for future generations."

Skipper Hammond is a free-lance writer.
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Philadelphia, Penn.
Contact: 217-328-2032

Get Ready For
TCI EXPO 91

Plan to attend TCI Expo 91, the
second annual trade show and educa-
tion conference sponsored by Tree
Care Industry magazine. It will be
held December 5-7 at the Hyatt Re-
gency and the Ohio Center in down-
town Columbus, Ohio.

Last year's trade show was a huge
success, and this year's show will be
even better! Every key supplier of
equipment, supplies and services will
be at Expo 91. You will get to see
state-of-the-art equipment and talk
with key people behind the equip-
ment. You will be able to compare
and make informed buying decisions
that will increase the productivity
and profitability of your operation.

For this year's seminar program,
we asked arborists what subjects
were most vital to their success and
livelihood, then we found the leading
authorities on those subjects.

Mark December 5-7 on your calen-
dar now, and watch future issues of
TCI for more information about the
biggest arborist show of the year.
TCI Expo 91!
Howard Leight Industries introduces the QB2 hearing protector, featuring soft foam pads which cover the entrance to the ear canal without being deeply inserted. This dielectric protector features an N.R.R. of 25 when worn under the chin and is comfortable to wear for long periods of time since the foam softens with body temperature. Low cost replacement pads make the QB2 economical. For further information contact Howard Leight Industries, 28 Levering Circle, Bala Cynwyd, Pa. 19004. Phone: 215-667-6046.

ROOTSinc introduces NoburN Natural Wetting Agent and Soil penetrant. NoburN is a steroid saponin extract from the desert yucca plant. NoburN does not have to be watered in after applying and it will not burn or disolor leaf tissue when used in hot or dry weather. Steroid saponins are natural plant fluids extracted by pressure, not chemically, so there is no danger of burning on any crop or of groundwater contamination. For more information contact ROOTSinc, 25 Science Park, New Haven, Conn. 06511. Phone: 1-800-342-6173.

Dri-Dek provides a low-cost way to protect your sensitive equipment and valuable cargo from damage caused by rough roads, tough handling, or just plain everyday use. Dri-Dek shields sensitive equipment, holds cargo in place, drains water and lifts equipment above wet compartment floors. Try any quantity of Dri-Dek absolutely free for 20 days. For further information contact Dri-Dek Corporation, Kendall International Centre, 2706 South Horseshoe Drive, Naples, Fla. 33942 Phone: 1-800-348-2398.
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- Unlimited advancement potential
- A prestigious address
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Arborist/crew leader position open for responsible individual with an interest in urban tree care. Some experience necessary but will train. We are an established company in Chicago's northwest suburbs that offers an excellent salary and benefit package commensurate with qualifications and experience. Please contact Rodney, McGinty Bros., Inc., 3524 Long Grove Road, Long Grove, Ill. 60047. 708-438-5181.

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Salesman wanted—experienced, capable of running a satellite office—Chicago western suburbs, 708-354-1181.

Sales/climber—Denver, Colo., area full service tree company needs person with a min. of 5 years field experience to perform a combination of sales and production duties. Ideal candidate will have degree in horticulture and be experienced in all phases of arboriculture. Good pay and full benefits. Contact Ralph Bronk at Mountain High Tree Service, 303-232-0666.

Tree Care Division Manager. Responsibilities include: sales, personnel, and equipment, with emphasis on pruning and fertilizing. Communication skills a must, managerial experience desirable. Salary and profit-sharing plus benefits. Send resume to Artistic Arborist, Inc., 706 W. Montecito, Phoenix, AZ 85013.


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Pruning is a breeze with our revolutionary TRI-EDGE design. We've combined the best-Japanese High Technology and Fanno Quality.
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  - Durable, marine grade laminated hardwood handle.
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Care, Inc., a leader in the Green Industry. Job includes scheduling, training and development of crews. Must have good knowledge of proper pruning and safety procedures. We are members in good standing with ISA and NAA. Please send confidential resume to: Arbor Care, 825 Mabury Road, San Jose, CA 95133 Fax: 408-437-1817.

FOR SALE


Hardware and software, by an arborist for the arborist. For more information about the industry’s best-selling package, call or write Arbor Computer Systems, 117 Weston Road, Westport, Conn. 06880. 203-226-4335.

Used equipment for sale:
- Chipmore 12-inch drum w/Ford 6-cylinder gas engine; 1978 Olathe 16-inch drum w/Ford 6-cylinder gas engine; 1971 Wayne 12-inch drum w/Chrysler V-8 gas engine; 1980 Chipmore 12-inch drum w/Ford 6-cylinder gas engine; Wood/Chuck 12-inch drum w/Ford 6-cylinder gas engine; Wood/Chuck Hy/Roller disc w/Ford 4-cylinder gas engine (2.3 liter); 1988 Vermeer 1250 chipper w/Perkins 4.236, 80-hp diesel engine, machine has 271 hours on it; 1987 Model 100 Brush Bandit w/Ford 4.23 gas engine, S/N 1099; 1985 Morbark Eeger Beever w/Cummins diesel engine, S/N 2085; Model 90 demo Brush Bandit w/Wisconsin VG-412, 37-hp gas engine, S/N 1191; 1990 Model 90 demo Brush Bandit w/Wisconsin VG-412, 37-hp gas engine, S/N 1237; 1990 Model 90 demo Brush Bandit w/Wisconsin VG-412, 37-hp gas engine, S/N 1238; Model 90 Brush Bandit w/Wisconsin VG-412, 37-hp gas engine, S/N 1211; Mighty Bandit demo w/new Onan 20-hp gas engine, S/N 2235; CB-90 demo chipper/chip box combo w/Wisconsin VG-412, 37-hp gas engine; 1989 Model 100 demo Brush Bandit w/Cummins 4B3.9 diesel engine, S/N 2698, machine has operated about 40 hours; Model 200+ demo Brush Bandit w/Hercules D-2300 diesel engine, S/N 3998, machine has operated about 50 hours; Model 200+ demo Brush Bandit w/Cummins 4B3.9 diesel engine, S/N 3955, machine has operated about 40 hours; Model 100 Brush Bandit w/Deutz F5L 912, 83-hp air-cooled diesel engine; Mighty Bandit PTO demo, S/N 2233. Contact Bandit Industries, Inc., 517-561-2270.


For sale: J.D. 440 skidder with skycrane bucket, with diesel pony engine, hyd. tool set up, good rubber front tire chains. Unit in A-1 cond. $16,500. Phone: 603-786-9272.

Versalift VO-50 tree trimming bucket truck, Arbor Tech 10' chip box, L tool box, cab protector, mounted on 1988 Int. DT-466 diesel 245 hp, 33,000 g.v.w., p.s. air brakes, radial tires, 6-speed trans. Nice unit. Asking $52,500. Please call 603-352-8330.

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Holan designed the 819 Tree Trimmer for the professional arborist. The Holan 819 features 270° of boom and 125° of lower boom articulation, a 55' working height, velvety smooth, full-pressure controls, a full ¾'' tree-flow return line for minimum heat build-up and maximum tool life, and the same rigid rectangular booms found on all Holans. The Holan 819 is the most productive and dependable tree trimming machine available.

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1973 50' HiRanger on Ford C-750 utility, 9.00 x 20 (90%), 5 + 2, positrack, in daily use, good condition, $17,500; 1983 Bean Rotomist, 100K, 300 gal., s.s. tank, on 1968 Chev., mint condition, $8500. Call 203-429-9972.

Take a look at our newly designed portable diesel powered stump cutter on video. You be the judge. Kinetic. 1-800-422-9344.

Condor Ind. presents the most powerful, impressive far-reaching deep root injector available on the market today. Applies polymer water saving crystals best (also available). For demonstration or a demo tape: FAX 213-822-1360 or phone 213-821-4131. Looking for new dealers. Condor Ind., 2554 Lincoln Blvd., Suite 107, Marina Del Rey, Calif. 90291.

Aerial bucket trucks—Hi-Ranger, Asplundh, Sky Worker—most major brands—40' to 95'. Also, brush chippers, stump grinders, tree spades, log loaders, and Rayco stump cutters. Parts for aerial buckets. Allied Utility Equipment Inc., W 204 North 11509 Goldendale Road, Germantown, Wis. 53022. Phone: 414-255-6161 24 hrs.


Very well established Los Angeles area tree service for sale. All equip., client lists, employees, 10-year lease on yard and office in very prime location. Gross income $550,000 per year for last 5 years. Been in business for 11 years. Very loyal and impressive clients! Must move!!! Sacrifice $180,000 firm. Serious inquiries only to: TCI, P.O. Box 1094, Amherst, N.H., 03031 Dept. GPO

Classified rates: $40 per inch (1-inch minimum), payable in advance. Send ad and payment to: Advertising Department Tree Care Industry P.O. Box 1094 The Meeting Place Mall Route 101 Amherst, N.H. 03031

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A Boom Of A Test

By Thomas M. Morgan

The Norway Maple (Acer platanoides) was imported into the United States in the 18th century by William Hamilton, a Pennsylvania landowner, to decorate his estate. Today, it lines countless streets and landscapes and is one of the major shade trees in our urban and suburban inventories. It even grows wild in many of our forested areas and has become a valuable lumber source.

Recently, however, we have noticed a major problem on our tree-lawn trees. In 1990, we had several trees uprooted in non-traditional fashion. Healthy-appearing trees with average canopies, good to fair growth rates, no obvious defects, etc., were uprooting in low to medium wind storms (from 15-40 mph) that came from an unusual wind direction—primarily from the South.

When we inspected the root systems, we found that many of the fine feeding roots were dead. Northern Ohio, as well as much of the country, had a severe drought in 1988 followed by two very wet growing seasons in 1989 and 1990. The roots died from thirst one year and drowned the next two!

As a result of these uprootings, we implemented a test that we call the “boom test.” Using our bucket truck, we place the upper boom against the trunk approximately two-thirds of the way into the canopy. A man stands on the ground near the trunk and inspects for a shifting or “loose” root zone. Using this new test, we have been able to remove more than 20 potentially hazardous, but normal-appearing, Norway Maples which could have been that 2 a.m. emergency.

Thomas M. Morgan is city forester in Cleveland Heights, Ohio. He assured us that his use of the bucket did not place any unreasonable stress on mechanical components. The test has been modified so that an arborist in the bucket pushes or pulls on a sturdy limb. This helps the crew detect potentially hazardous trees.

Do you have a story for From the Field? TCI will pay $50 for published articles. Submissions become the property of TCI and are subject to editing for grammar, style and length. Entries must be submitted by field workers and must bear the name of the worker and his employer or they will not be considered for publication. Articles and photos must be received by the first day of the month for the following month’s issue.
SHINDAIWA BURES THE COMPETITION.

At just 8.6 pounds, our Shindaiwa 360 is one lightweight that really packs a wallop. It challenged some of the biggest names in the woods and left 'em in the dust.

THE MOST POWER. THE LEAST WEIGHT.
Our 360 delivers 2.5 horses of raw power right out of the box. Which makes the 360 the most powerful saw of its size on the market—powerful enough to handle 14" to 16" bars with ease. It's a perfectly balanced, lightweight, high-revving machine with an anti-vibe system so well designed that it makes wood cutting positively enjoyable. Even the sound of its exhaust tells you this baby was built to perform.

SMALL ON SIZE. BIG ON FEATURES.
The 360 works like a pro 'cause it's built like one. It's the only saw in its class with every one of these big pro saw features:
- A one-piece electronic ignition for fast, reliable starts
- An adjustable clutch-driven automatic oil pump for better chain oil economy
- A 2-ring piston for long-term performance
- A 2-stage air filter for added engine protection
- A captivated recoil spring for easy maintenance
- A replaceable Micarta rope guide for added quiet and a fully adjustable carburetor that's boot mounted to absolutely eliminate vapor lock.

SAFETY FIRST.
Safety is enhanced by rear hand guards, safety chain brake, throttle interlock, low kick-back chain, a reversible low-kick sprocket nose bar and a rubber-coated chain catcher. All standard. The 360 also features a full 6-point anti-vibration system, so it's surprisingly comfortable to work with. It's less fatiguing. More productive.

BUILT TO LAST.
Our new 360 is built to log the hours. All of which will really fly by. Because unlike bulkier saws, the Shindaiwa 360 is actually fun to cut with.

AND SPEAKING OF STRENGTH...
Shindaiwa chain saws are backed by one of the strongest dealer networks in the country. So you'll always have the parts and service you need. When you need them.

EVEN OUR GUARANTEE IS STRONG.
We're so proud of our new Shindaiwa 360 that we back each one with a 7-day money back guarantee: Try our 360 for one full week. If you're not convinced it's the best small saw you've ever used, we'll buy it back. No questions asked. That's one tough guarantee.

But then again, it's one tough saw.
Money may not grow on trees, but it sure does when you move them! As a result, Vermeer Tree Spade owners are earning tens, even hundreds, of thousands of dollars each year filling the needs of homeowners, buildings and developers, golf courses, institutions, plus highway and public works departments all over the world. And only Vermeer offers you the world’s complete line and the world’s largest production model, the 9400.

Big trees mean improved property values, instant gratification for your customers ... plus a solid profit for you as a new venture or new profit center within an existing business.

Discover today’s environmental answer for tomorrow’s treeless landscape needs. Send today for a free book on the profitability behind moving trees. From Vermeer ... the money movers!

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