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 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 Belts Cutter Bar</td>
<td>Blades Belts Anvil</td>
</tr>
<tr>
<td>Hydraulic System</td>
<td>None</td>
</tr>
<tr>
<td>Feed System</td>
<td>None</td>
</tr>
<tr>
<td>Feed wheels, feed teeth, bearings, bushings, feed wheel springs, feed wheel yokes, etc., etc.</td>
<td>Hydraulic tubes, fittings, hoses, motors, filters, tanks, flow dividers, O-rings, seals, (over 30 hydraulic components alone)</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.

1-800-331-1038

MANUFACTURING
100 Asplundh Avenue
Creedmoor, NC 27522

Please circle 5 on the Reader Service Card
CONTENTS

Features

4 HAZARD TREE EVALUATION
Several factors determine whether a tree is hazardous.

22 PEOPLE PRESSURES
—And how they affect trees.

Departments

2 OUTLOOK

12 INDUSTRY INPUT

14 WASHINGTON IN REVIEW

17 MANAGEMENT EXCHANGE

20 TREES AND THE LAW

26 INDUSTRY ALMANAC

27 CUTTING EDGE

28 CLASSIFIED

32 FROM THE FIELD

COVER PHOTO:
An arborist takes wood samples to assess strength loss in a hazard tree. Photo courtesy of F. A. Bartlett Tree Expert Company.
It's better to lose the job if you must than it is to compromise your professional reputation.

I would wager that ever since man created a tool with which to cut a limb, people have been complaining about topping trees. It certainly remains a major issue today. Every place I go I hear about it.

I've had some interesting experiences with topping situations. Driving across the interior, rural part of a Midwestern state one time, we were able to determine the height of the aerial lift trucks in each town we passed through. This was the height at which the trees along the way had been topped. Some were 40 feet, others 45, and still others 50 feet.

Another time I was looking at jobs with an arborist in a major Midwestern city. The trees in his city included a large population of silver maples. His clients came from a culture where residential and street trees were a source of firewood. Cutting back large pieces was a standard practice for them but not for him. He refused to do it and his business suffered as a result.

On more than one occasion, arborists have called me to complain about competitors topping trees asking what I, they, we could do about it. We can point to all the available written educational material and seminars as a solution. Unfortunately, much of the time our educational sermons only reach the choir and the congregation who needs to know is not present.

In my opinion, the best solution to the topping problem is “Just say NO!” Explain to clients why topping shouldn’t be done. Provide clients with articles that discuss topping. Educate clients. If that fails, let your competitor do it. Eventually, people will become aware of the quality of your work and recognize that as a professional you know how to prune trees properly.

It’s better to lose the job if you must than it is to compromise your professional reputation.
**Take the chipper to the trees...**
...with the Bandit self-propelled whole tree chippers

19" Dia. Capacity
MODEL 1900
TRACK BANDIT

14" Dia. Capacity
MODEL 1400
TRACK BANDIT

The key to disposing of big trees and stumps...

**THE LOG BUSTER**

- Splits logs up to 10' in length and virtually any diameter
- Splits stumps to remove dirt and rocks

**THE MODEL 1250 TREE BANDIT WHOLE TREE CHIPPER**

The tree man's whole tree chipper

- Heavy-duty 12" capacity
- Up to 200-HP diesels available
- Open spout design with 64" wide infeed chute and 19" wide feed wheels
- 360° swivel discharge
- Hydraulic winch available

An all purpose chipper...

**THE MIGHTY BANDIT II**

The Mighty Bandit II combines gravity-feed with a two-wheel hydraulic feed system which is excellent for hard-to-chip material such as:

- Shrubbery prunings
- Palm fronds
- Cardboard
- Paper plastic

...and does very well with limbs and brush

For more information, call or write:

**BANDIT INDUSTRIES, INC.**

6750 MILLBROOK RD.
REMUS, MI 49340
PHONE: (517) 561-2270
FAX: (517) 561-2273
Hazard Tree Evaluation

Much of the following article was excerpted from “Hazardous Tree Evaluation and Management,” an internal publication of the F.A. Bartlett Tree Expert Company. The manual was written by Dr. Bruce R. Fraedrich and Dr. E. Thomas Smiley of the Bartlett Tree Research Laboratories. Bartlett people use this manual only after extensive training. Hazard tree evaluation requires a very thorough knowledge of tree biology.

If an arborist can be shown to have an obligation to a property, tree or client, then he has the responsibility to keep that site safe or inform the proper authority of a hazardous condition. If the arborist fails to meet this obligation, then he can be considered negligent in the event of an injury or damage arising from the hazardous condition. An arborist can be held liable not only for the recommendations or work he performs, but also for what he fails to perform.

For a tree to be considered unsafe, there must be a structural defect which predisposes it to failure as well as a “target” such as a structure, road, walkway, campsite or other area where property could be damaged or people injured. For example, a tree with a large basal cavity would not be hazardous in a forested area, but would be considered a hazard on a homesite or near a place of business.

Trees should be inspected annually and after major storms for structural defects. A more frequent inspection program should be established in high use areas or in areas with a history of tree failure. A thorough inspection of the entire tree and area around the plant is necessary to detect potentially hazardous conditions. As you will see, there are several factors that should be evaluated.

TREE CARE INDUSTRY - AUGUST 1991
Location
Hazard trees are more likely found in certain locations including:

- **Edge trees**—Trees bordering natural areas, roads, drives and parking areas are less protected and may have experienced root damage during the land clearing.

- **Lone trees**—Trees standing alone, especially tall trees, are more prone to lightning strikes. If it is the only remnant of a previous wood lot, a lone tree may have a damaged or undersized root system.

- **High traffic areas**—Trees in high traffic areas are prone to soil compaction, root wounding and root decay.

- **Wet sites**—Trees growing on wet sites generally have shallow root systems. Trees on sites that have been altered suddenly by grade changes resulting in poor drainage and those in areas that receive excess irrigation are more likely to have root rot.

Tree condition
The following are common hazardous conditions:

- **Dead branches**—Look for branches more than one inch in diameter. Pay special attention to dead branches and hangers over roads, drives, walkways and structures.

- **Topping cuts**—Stubs left from topping generally decay. Sprouts (branches) from topping cuts are more prone to breakage due to their weak attachment.

- **Weakly attached branches**—Branches with a narrow angle of attachment with included bark are more susceptible to breakage.

- **Unbalanced crown/leaning trees**—Trees with unbalanced crowns are more prone to failure than symmetrical trees.

Had this tree been inspected by a tree care professional, radial separations and open cavities in the trunk would have indicated extensive decay, the most common hazardous defect in urban trees. Photo courtesy of Don Blair.
A hazard tree must have a structural defect that makes it prone to failure as well as a "target." This tree borders a popular shortcut to a high school campus.

Extensive decay or minor wound? Cracks, radial separations in the wood and bark, signal that further investigation is needed.

Lightning injury—Bark injuries extending in a spiral pattern from the top to the base indicate lightning injury. Wood affected by lightning decays rapidly.

Multiple stems from the root crown—Multiple-stemmed trees originating from stump sprouts often have extensive internal decay in the root crown area. Sprouts formed low on healthy stumps are less likely to be decayed.

Abnormal flare—Abnormal proliferation of the lower trunk tissues often is associated with lower stem and root decay.

Decay—Decay in the trunk or major branches is the most common hazardous defect in urban trees. Symptoms may be obvious, such as open cavities, or may be inconspicuous and require careful examination.

Symptoms of decay

Here are the more common symptoms of decay affecting the stem and support roots:

Open cavities—Cavities represent deterioration of bark, sapwood and heartwood.

Fungus fruiting structures—Any fungus growth, including shelf-like conks or mushrooms growing on live trees, indicates extensive wood decay. Often the position of the structure indicates the location of the decay. For example, mushrooms or conks growing on the root collar indicate extensive root deterioration. Mushrooms growing from the soil adjacent to trees may indicate a root pathogen or a beneficial mycorrhizal fungus. Positive identification of the mushroom away from the stem or root collar is necessary.

Cracks—Radial separations in the wood and bark may be associated with extensive wood decay or may be associated with minor wounds, rapid growth rate or sudden temperature changes. Cracks allow the wood beneath to dry and become more brittle.

Cankers—Cankers are localized dead areas on the bark of stems and branches caused by fungal and bacterial pathogens. Wood beneath cankers may be decayed.

Loose/dead bark—The final stages of root decay are often associated with loose or dead bark on the root collar.
Time is money in the tree care business, and the time you save with Versalift puts money in the bank.

Fewer set-ups, more worktime are just two reasons the VERSALIFT VO-50 is the choice of tree care professionals from coast to coast. It's been field proven to be an effective, hardworking, and dependable tool.

The VO-50 gives you reach and movement others can't match, and it's done without troublesome cables or chains, meaning safer, low-maintenance operation.

To see a VO-50 on your work site, call or write today for more information and the name of your nearest VERSALIFT distributor.

It's TIME to check out VERSALIFT!
4. Use the following formula to determine strength loss:

\[
\text{Strength loss}\% = \frac{(\text{Diameter of decay column})^3 \times 100}{(\text{Diameter of stem})^3}
\]

When trees have open cavities, the reduction in strength from the loss of the outer rings of wood must be entered into the strength loss formula. Loss in strength from open cavities is significant because the outer rings of wood provide most of the structural strength.

The Bartlett Company uses the following formula to determine strength loss in stems with decay and open cavities:

\[
\text{% Strength Loss} = \frac{d^3 + R(D^3 - d^3) \times 100}{D^3}
\]

d = Diameter of decay column
D = Stem diameter (inside bark)
R = Ratio of cavity opening to stem circumference

Measure the stem circumference (stem diameter x 3.14) at the point of decay. Calculate the ratio of the cavity opening to the circumference of the stem by measuring the width of the cavity and dividing by the circumference of the stem.

\[
\text{Ratio of cavity opening (R)} = \frac{\text{Width of cavity opening}}{\text{Stem circumference}}
\]

**Root defect evaluation**

Up to 75% of all tree failures are root-related. The majority of failures occur when winds exceed 50 mph, but may occur under any wind conditions if the roots are sufficiently weakened.

Two types of failure fall in this category: root failure and ground failure.

Ground failure is extremely difficult to predict and occurs when the soil does not have enough strength to keep the roots down. Soil and roots are exposed when the tree falls over. This type of failure can occur in any soil texture if the soil is wet. Failure is more common
on sandy and very shallow (less than 2 feet deep) soils. Soil failure also occurs when trees are surrounded by pavement, which does not allow the root system to develop sufficiently to support the tree.

Root failure occurs when roots do not provide the necessary support. It occurs more readily on trees that have root decay or other root problems. Trees with extensive root decay often show few or no symptoms of decline. External indicators of root decay include:

a. Dead (loose bark) on the roots, root flare or lower trunk;
b. Fungus fruiting structures around the root flare. These include mushrooms, conks and bracts on or immediately adjacent to the tree;
c. Oozing from the root flare, lower trunk or wounds on the lower trunk;
d. Cuts or fill soil moved beneath the tree;
e. Cracks in the soil above or beside major roots.

Root decay is difficult to assess since it starts on the lower section of the root and works its way upward so the most visible section of the root shows the fewest symptoms. When root decay is present in the buttress or flare roots, it is usually extensive.

If root decay is suspected, the first step is to perform a root collar inspection. Remove the soil from the root collar and major buttress roots, and use a pen knife to nick the bark on major root flares and valleys between flares to determine whether the bark is healthy.

The next step is to determine if decay is present in the roots or base of the trunk. Using a drill with 1/8-by-8-inch bit, increment borer or other method, drill downward into each major root issuing from the root collar. Consider the entire root decayed if any defect is found. Repeat the same procedures, drilling toward the center of the tree in the valleys of the root collar, to determine if basal decay is present. Often lower trunk heartrot is associated with root decay. Record the number of healthy and decayed roots.

Management of hazard trees

After a tree has been assessed for structural weakness comes the tricky part of hazard tree management. A decision must be made on remedial actions, ranging from pruning to removal and should be done as soon as possible to avoid liability problems. Sometimes the decision may be to do nothing if the hazard is negligible.

Here are some recommendations on what to do under the following conditions:

1. Dead trees—If a tree is dead or if more than 50% of its major limbs are dead with a history of decline, it should be removed.

2. Trunk decay—The amount of strength loss a stem can tolerate depends on many factors, including wood strength, severity of stress and exposure. The Bartlett Company has established a strength loss threshold— the point at which the tree is removed—at 33%.

3. Dead branches/hangers—Dead limbs should be pruned out. All deadwood one inch or larger should be removed.

4. Decayed limb/overextended limb—When strength loss exceeds the threshold, remove the limb. Otherwise, prune to reduce weight and/or install a cable to support weight.

5. V-crotches—If tree is young, remove or severely prune back one of the limbs. On mature trees, bolt and cable limbs. If decay is present, remove the affected limb(s) or entire tree.

Documentation

After the trees have been inspected and a decision made on the action to be taken, the client must be informed. All hazard tree reports that recommend further action must be in writing, and a copy of the report or letter must be kept in the client’s file.

Inspections and all tree maintenance/remedial treatments should be documented in writing and should include the name of the arborist performing the inspections, date of inspection, description of hazardous conditions, maintenance performed to correct unsafe conditions and date and names of individuals who corrected the condition. Written documentation of hazardous conditions is particularly important to avoid possible litigation.

The Image Builder

Arbortech Quality

When quality work is your trademark, you need a quality image. Arbortech builds chip trucks that give your company a professional look and are equipped with all the performance features you need. Galvanneal steel body resists rust for years of service and good looks.

Call Today
1-800-255-5715

Please circle 4 on the Reader Service Card.
The sensible alternative to spraying.

Mauget® micro-injection fits today's environmentally-conscious arborist. Capsules of premeasured and scientifically designed Mauget nutrients, insecticides and fungicides keep shade trees healthy and beautiful without spraying.

Mauget micro-injection is a closed system. No spraying, no drift. EPA registered and university proven materials are injected directly into the sap stream of the tree. Conductive vessels inside the tree transport products throughout the tree. There's no residue on non-target species and no waste.

Arborists in the Northeast, Southeast, Midwest, Southwest and Northwest report success after success on thousands of shade trees. Mauget micro-injection works time after time. It's performance proven every day — for more than 20 years.

Save trees and the environment. Inject Mauget.

J.J. Mauget Company
2810 N. Figueroa Street
Los Angeles, CA 90065
1-800-TREES-RX

Please circle 20 on the Reader Service Card
INDUSTRY INPUT

A best-seller
Your magazine should be on the best-seller list. A seminar in itself. No nonsense, useful information.
Give us more of Don Blair. Don speaks our language. Don’s article on estimating and root crown evaluation was the most useful article I have seen. One day after I read the article, I made $90 on two estimates. I have tried charging for estimates in the past and have been successful about 10% of the time. When you have 25 competitive tree service firms providing free estimates, it takes some convincing to get paid for your time. By building value in your company first, providing specifications for pruning, identifying structural defects, insects and diseases, and providing the customer with the suggested undervalued $45 per-man-hour national average cost, the customer can use this information to judge and compare which company to choose.

Keep it coming and thanks again to Don Blair and TCI.
Mark Porter
Certified arborist
Mark’s Tree Service
Riverside, California

First-rate job
Thank you for a first-rate job on TCI. As a vendor, I find that your publication is an important forum for our advertising, and your articles help those of us in the “iron” end of the business to keep up to date with our most valued customers.
Mike Burke
Eastern Regional Sales
Bandit Industries

“The Fastest Solutions to your Splitting Headache.”
The GFX SUPER SPLIT rack and pinion, gear-driven, Log Splitter.

SEE IT TO BELIEVE IT!
The patented SUPER SPLIT log splitters are the fastest made, up to four times faster and more economical (under a dollar a day) than any other type of splitter. The 2½-second cycle time makes SUPER SPLIT A WORLD RECORD HOLDER, 16 minutes 51 seconds to split a cord of wood. SUPER SPLITS have an impact of 7 to 16 tons and accept any size log up to 25½” in length. They use grease fittings instead of oil for easy maintenance and offer the versatility of interchangeable gasoline or electric drive as well as many other options. Take one or more and watch your headache disappear.

GFX CORPORATION
Manufacturer of the famous LOG N LAWN™ Carts
200 Recreation Park Dr., Hingham, MA 02043 Tel: (617) 740-0350

Please circle 14 on the Reader Service Card

KDX MULCHER
The most efficient and cost-effective brush management system available.

* Safe along roadside
* Pipeline maintenance
* Powerline clearing
* Mounts on any excavator

Kemp West, Inc.
206-334-5572
FAX: 206-334-5366

Please circle 18 on the Reader Service Card

BORDER CITY TOOL
CARBIDE TIPPED STUMP CUTTERS

ROUND REVERSIBLE POCKETS
REGULAR (STANDARD)

HODGES STUMP CUTTER
ECONO

THREADED STUMP CUTTER

BORDER CITY TOOL AND MANUFACTURING CO.
• Over 31 Years Experience •

23325 BLACKSTONE
WARREN, MI 48091-2675
Telephone: (313) 758-5574

BUY DIRECT FROM
THE ORIGINAL MANUFACTURER
Call Toll Free 1-800-421-5685

Please circle 8 on the Reader Service Card

Letters should be addressed to:
Tree Care Industry, Editor
P.O. Box 1094
The Meeting Place Mall
Route 101
Amherst, N.H. 03031

12
Don't be a NO SHOW at the ONE SHOW!

GREEN INDUSTRY EXPO/91

The Largest Lawn/Landscape Show EVER!!
IN THE NEW TAMPA CONVENTION CENTER — NOV. 19-21, 1991

SPONSORED BY:

ALCA
Associated Landscape Contractors of America

PLCA
Professional Lawn Care Association of America

PGMS
Professional Grounds Management Society

Two Great Educational Conferences
Register and attend the program that targets the specific needs of your business.

PLCAA EDUCATIONAL CONFERENCE
"Meet The Challenge"
EDUCATIONAL SESSIONS

Keynote Address by Special Guest
"LAWN CARE INDUSTRY CHALLENGES"
PRECONFERENCE WORKSHOPS SUNDAY NOV. 17

ALCA/PGMS LANDSCAPE AND GROUNDS MANAGEMENT CONFERENCE
"Network With Industry Leaders"
EDUCATIONAL SESSIONS

Keynote address by Jay Levinson,
Author of "Guerilla Marketing Attack"
WINNING BIG PROFITS FROM YOUR SMALL BUSINESS

CONFERENCE INFORMATION (404) 977-5222

Get Details Now... complete and return this form or Call (404) 973-2019
Send more details on:
☐ I'm interested in attending the show
☐ ALCA/PGMS Landscape and Grounds Management Conference
☐ PLCAA Educational Conference
☐ I'm interested in exhibiting

NAME

COMPANY

ADDRESS (STREET, CITY, ZIP)

PHONE ( ) FAX ( )

Mail to: GREEN INDUSTRY EXPO. 1000 Johnson Ferry Rd., NE, Suite C 135, Marietta, GA 30068-2112

Please circle 15 on the Reader Service Card
Pesticides & Communities
Supreme Court Rules In Favor Of Local Ordinances

Recently the U.S. Supreme Court unanimously ruled that every community in the country can enact its own pesticide regulations. For the pesticide applicator, the ruling could result in a hodge-podge of ordinances, permit requirements and the myriad of paperwork that accompanies such requirements.

Meetings have been scheduled for those who have a vested interest in this situation to determine what action is needed. The tree care industry will be represented by the National Arborist Association.

In the meantime, new pesticide regulations could appear in your area in the near future. It is imperative that those who may be subject to such regulations monitor developments closely.

The court's decision came about as the result of a suit in Wisconsin, where the town of Casey enacted a regulation that limited spraying. The outcome of that case was that the town ordinance was declared void. Subsequently, the town and the Wisconsin Public Intervenor appealed the ruling and the case eventually made its way to the U.S. Supreme Court. On June 21, the Supreme Court found in favor of the town and the Public Intervenor.

In effect, the ruling struck down the long-held position of state courts and federal and state regulatory officials that pesticide application regulations were limited to federal and state agencies, as provided in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). In its decision, however, the Supreme Court said that the wording of FIFRA prevails, not the act’s legislative history and, therefore, FIFRA does not preempt local ordinances.

In looking at the rights of the local community, the Supreme Court stated, “The statute does not expressly or impliedly preclude regulatory action by political subdivisions with regard to local use. To the contrary, FIFRA implies a regulatory partnership between federal, state and local governments.”

Despite the Court’s decision, Justice Byron White points out: “Congress is free to find that local regulation does wreak havoc and enact legislation with the purpose of preventing it.”

FIFRA Amendment Proposed

In June, Senators Joseph Lieberman (D-CT), Harry Reid (D-NV) and Dave Durenberger (R-MN) introduced S.1353, a bill that would amend the Federal Insecticide, Fungicide, and Rodenticide Act. The proposed amendment would make it easier for the Environmental Protection Agency to remove pesticide registrations, cause registrations to expire after nine years, and require the registrant to reapply for registration.

The bill was filed as the result of concern over the length of time it takes EPA to cancel a pesticide, the amount of information EPA has regarding the potential toxic effects of some chemicals, and “the inadequacy with which this information is relayed to the consumer.”

Integrated Pest Management (IPM) training would be required for certified applicators under the bill. Ironically, S.849, also introduced by Lieberman and Reid, practically precludes the effective use of IPM techniques.

If passed, S.1353 could effectively reduce the number of pesticides available as reregistration deadlines would be difficult to meet and obtaining new information required for periodic examination of a pesticide may not be cost-effective. This is already the case under existing reregistration requirements as manufacturers look at the reregistration of dormant oil.

The bill is still in the initial stages; new developments will be reported.
A Complete Arborist Package Insurance Program*

Reduce your insurance costs up to 40%
Call us today 1-800-ARBORS-1

- High limits
- Low Rates
- Flexible Payment Plans
- Broad Coverages

Albiez Insurance Agency
2444 Morris Avenue, Union, New Jersey, 07083

*Not available in some states
Please circle 2 on the Reader Service Card
Home Works.

Basic Training Was Never This Easy.

The NAA with assistance from some of the best minds in arboriculture has completely revised and updated its popular Home Study Program for arborists.

This two volume program contains 16 sessions and tests on all areas of tree care. This is an opportunity for field personnel to improve. Best of all, the NAA Home Study Program can be completed during the student's spare time at a pace comfortable to the student.

More than 5,000 participants have learned to work more efficiently and professionally as a result of the NAA Home Study Program. Upon satisfactory completion the student will receive a certificate and will keep the two volume set as a permanent reference resource.

Put someone who is important to your business to the test, they'll be glad you did. Cost to NAA members is only $75 per volume. Non-members $100.

To order, simply fill out coupon and mail in with your check or credit card number.

Company ___________ Contact ___________
Street ___________ State __ Zip __
Telephone # ___________

- HSP Series I @ $75 Members $100 Non-members
- HSP Series II @ $75 Members $100 Non-members
- Series I & II @ $135 Members $180 Non-members
- Check enclosed payable to NAA
- Charge to VISA or MasterCard
Account # ___________ Expiration Date __
Signature ___________

National Arborist Association
P.O. Box 1094, Amherst, NH 03031-1094
603-673-3311

Please circle 23 on the Reader Service Card
Pruning & Public Education

By Gene Poulv

We at the E.F. Pouly Company, like many other firms that provide landscape and tree care, are frustrated when we see improper pruning practices. We have seen street trees planted by our landscape division being improperly maintained by another company that had submitted a low bid for the pruning work.

We were particularly upset with the excessive pruning job done on a 300-year-old tree at a local library. We had been maintaining the tree as a public service known as “Adopt a Tree.” The tree was severely pruned by a utility sub-contractor even though the library administrator had requested that the utility company allow our company to do the pruning.

Several factors may be responsible for allowing such practices to continue. In some instances, customers are lured by the low prices that often accompany inadequate or improper services. In others, companies buy into the old axiom that the customer is always right, even if what the customer wants is wrong.

We feel that there are several remedies to the situation. First, we see a need for measurable standards. Since we currently see only voluntary certification programs and a lack of consistency, state licensing might be a viable alternative.

Second is the need for customer education. Please don’t insult your customers’ intelligence by depriving them of solid arboricultural information, which may not initially agree with their pruning specifications. Once they have sound and correct information, many customers will change their minds and thank you for your interest and concern. Customers want service but they also need to be able to trust you, the arborist.

After a series of brain-storming sessions, our company initiated a public education campaign. Our tree care

As part of a public education campaign, the E.F. Pouly Company posted these signs to show the right way and the wrong way to prune a tree.
supervisor suggested installing “right” and “wrong” pruning signs in front of two trees to send a visual message. We selected trees in our nursery that were next to each other but were too large to sell. Our nursery and yard office are located along a well traveled road, and initially we put “right” and “wrong” signs in front of the two trees we had chosen. People began calling us out of curiosity wanting to know if we were referring to the trees. After explaining several times what the signs meant, we decided we had to make some changes. We added the word “pruning” to the signs to emphasize that pruning maintenance was an ongoing process on those two trees.

In another situation we installed a “To be pruned by” sign in front of a tree at a busy intersection, waited two weeks, pruned the tree and blocked out the words “to be” for a “before” and “after” effect.

In addition, our certified landscapers and arborists have been available for radio interviews and talks to garden clubs and other organizations.

Please don’t insult your customers’ intelligence by depriving them of solid arboricultural information, which may not initially agree with their pruning specifications.

Through these efforts we feel that we are not only educating the public but also improving the professionalism of our industry on a local level. Maybe some of these techniques can work for you.

Gene Poulv is president of the E.F. Poulv Company in Orrville, Ohio.
How come you know so much about Professional Tree Care?

I went to TCI Expo last year.

What's TCI Expo?

Only the biggest trade show in the tree care industry. The seminar program covers all the basics. I really learned a great deal about running my business more efficiently. I even brought my employees and they received recertification credits.

Where is it and what are they talking about this year?

Look at this list!

Make Your Tree Service Grow
How To Be A Crew Leader
Preventing Construction Damage To Trees
The Top Diseases Of Shade Trees
Equipment For Waste Wood Recycling
End Uses For Recycled Wood Waste
Managing Time With Power Scheduling

Recruiting, Retaining and Developing Field Personnel
All That There Is To Know About Pruning
The Top Insect Pests Of Shade Trees
Cost Analysis Made Easy
The Latest In IPM
Thirty Ways To Work Safer And Smarter

WOW! THEY HAVE SOMETHING FOR MANAGEMENT AND FIELD PERSONNEL. NO WONDER YOU KNOW SO MUCH. TELL ME MORE.

There will be attendee information in next month's issue of Tree Care Industry Magazine. Fill out the information card early and get ready to find out what tree care is really all about.

TCI EXPO 91
December 5–7, 1991
The Ohio Center
Columbus, Ohio

Sponsored by Tree Care Industry Magazine and the International Society of Arboriculture
Trees & Boundaries

Trees on boundary lines can often lead to lawsuits for a variety of reasons. Generally speaking, however, the courts regard such trees as common property and don't allow either landowner to take actions that would injure or damage the trees. There are exceptions, such as when boundary trees prevent a landowner from using his property in a reasonable manner or when a boundary tree is a nuisance or causes damage.

There are several cases that support the proposition that boundary trees belong to the landowners jointly or as tenants in common. One case involves a row of cypress trees growing on the boundary that separated two adjoining orange orchards. One of the landowners in the case cut down eight of the trees and threatened to continue to cut every alternate two trees until he had cut down one-half of the entire row. His neighbor took him to court. The judge found in favor of the plaintiff and forbade the first landowner to cut down any more trees.

In deciding the issue, the court ruled that if a tree stands so close to the boundary line between adjoining properties that portions of its body extend into each, then the tree is the property in common of both landowners. The court further held that neither property owner could cut the tree without the consent of the other, nor could either cut away the part which extends into his land if he thereby injures the common property in the tree.

Thus, the court said that the defendant's estate in the cypress trees must be considered as that of a tenant in common in the trees themselves, with an easement upon the plaintiff's land for the sustenance of such trees.

In a similar case, a landowner sued his neighbor over the neighbor's right to remove a large maple tree, or parts of the tree. The court ruled that each landowner held a common interest in the tree standing on their common boundary, and that one landowner could not remove the tree without the other's consent.

In yet another case, a landowner tried to prevent his neighbor from maintaining a row of willow trees that had been standing for more than 40 years on their common boundary. The court denied the petition and ruled that the trees had been planted and had served as a boundary line fence for more than 35 years.

As these cases demonstrate, the courts will protect the interests of an adjoining landowner with regard to a tree standing on the boundary line under a variety of circumstances.

There seems to be a common sense rationale behind these rulings. If each landowner were regarded as the absolute owner of that part of the tree standing on or over his land, it would lead to a division that could result in the death of the tree.

Sometimes such cases have a twist. In one such case, a property owner was sued by his neighbor for causing the death of a large oak on the boundary line. The tree's roots were exposed while excavation was being done so that a residence could be built, resulting in the death of the tree. The court ruled against the neighbor, saying that the first property owner was exercising his right to use his land in a reasonable way, i.e., building a home.

In another example, a property owner sought to remove two trees that had
been planted on a common boundary line. In reviewing the facts, the court found that the roots of the trees had extended so far as to damage the foundation of the property owner's home. The court allowed the property owner to remove the offending tree, but not the second tree, which was not regarded as a threat.

So much for removal. As for trimming, the courts have allowed the limbs or branches of boundary line trees to be cut or trimmed within certain limitations. In several cases, the courts have allowed property owners to trim branches of boundary line trees hanging over their land so long as the common property of the tree is not injured.

In somewhat different but related cases, the courts have said that a property owner can cut branches off a tree even if the trunk of the tree is completely in his neighbor's yard and is not considered a boundary line tree. In such cases, the courts have ruled that a landowner's property rights extend indefinitely upward and those rights are protected from invasion to the same extent as surface rights.

Most cases have taken the view that where a tree is located near a boundary line, the tree's roots and branches are considered a nuisance and the adjoining landowner can cut them. The underlying principle is that a landowner owns both the ground below and the air above his property and he has a right to protect it.

This article is based on information supplied by Victor D. Merullo, an attorney in Columbus, Ohio, and author of The Law of Trees. It is not intended to replace advice from legal counsel in dealing with particular situations.
People Pressures
---And How They Affect Trees

By Steven Jakobi

For most homeowners and city residents, ornamental and landscape trees provide beauty, privacy, shade and relief in the often congested urban scene. Yet, many of these trees suffer from a variety of stresses associated with human activity. Trees may be subjected to neglect and abuse and to pressures often unintentionally created in their man-made environment. When weakened by these forces, trees may develop a host of problems and sometimes are unable to cope with insect pests and diseases.

Scientists have long debated whether air pollutants such as acid rain, smog and ozone seriously affect trees. While most experts agree that local and regional pollution sources can seriously injure trees, the long-term effects are not well understood. Far more significant and immediate impact is created in urban environments by individual human activity.

“The top four most important problems related to human activity are the selection of the wrong species for the wrong site, soil compaction, confinement to small spaces and mechanical damage,” says Dr. R. J. Stipes, a Virginia Tech plant pathologist and consultant. These factors, singly or in combination, may seriously reduce the growth rate, vigor and life span of urban trees.

Site selection

Selection of species or cultivars without regard for the growing site can have...
Multiple problems of soil compaction due to heavy traffic, and bark damage as a result of vandalism on oak at a playground.

Soil compaction

Dr. James Sherald, of the Center for Urban Ecology at the National Park Service, agrees that soil compaction is one of the most important problems facing trees in the urban landscape. Compaction reduces aeration of the soil and "starves" roots of oxygen. It can also create erosion and water runoff so that the roots are deprived of moisture as well. The first symptoms related to root problems are noticed in the crown. Leaves in the uppermost branches will show early "fall coloration" and gradual dieback of branches occurs due to the lack of absorption of water and nutrients from the soil. Where compaction is common, such as near playgrounds, camping areas or street plantings, the soil may have to be loosened or aeration holes may have to be drilled from the trunk out past the dripline. These procedures are not always successful and the soil may need to be excavated and replaced around the affected tree. Wood chips or shredded bark may then also be applied to keep off excessive traffic and to conserve soil moisture. Some species, such as sweetgum, white oak, and flowering dogwood, are especially sensitive to soil compaction. In heavily traveled areas, planting of these trees may be avoided altogether, or they should be planted in raised planters. Alternatively, extended pits (planting

subtle or dramatic results. Recently, a client called about several dying paper birch trees on his property. Eight young trees were planted several yards apart from one another the previous spring. They were located near the house and were surrounded by concrete walkways and a heat reflecting sandy groundcover in the courtyard, where air circulation was poor and summer temperatures sweltering. In nature, paper birches occur in dense forest stands, often near water, and they do not tolerate heat stress well. The dying birches were suffering from a very serious bronze birch borer problem. These insects specialize in locating and infesting stressed paper and white birches, and often girdle them in the process of tunneling under the bark.

Site selection can influence tree health in other ways, too. Often, fast growing trees like Norway, red and silver maples, and yellow poplar (tulip-tree) are planted under power lines or near buildings and other structures. Such trees will require frequent future shaping and pruning, resulting in excessive wounding and crown loss. You can enhance the vigor and health of the tree if you are familiar with the growth rate, temperature tolerance and other site requirements (soil acidity, moisture, light preference, etc.) of the species before planting.

WESTERN TREE & LANDSCAPE SUPPLY

12' Sectional Pole Pruners - Complete with 2-6' sectional fiberglass poles, rope & head
Corona 1600 reg $98.00 / Marvin PH4R reg $95.00 YOUR CHOICE $89.00 (UPS Shippable)

SPECIALS thru August

CORONA NEW RAZOR TOOTH SAW
Reg $19.95 SALE $13.99

"NESS"
THROW WEIGHT
Available in 16, 18, & 20 oz.
Reg $9.95 SALE $8.99

MAX 1 Ear Plugs
Preshaped & tapered for easier insertion R.H.R. 33
$1.49 pr. or $24.00 pr. 200

CALL FOR OUR
NEW 1991
CATALOG!!

To Order Call (800)94-ARBOR or FAX Your Order 24 hrs.(916)944-4487
7627 Fair Oaks Blvd, Carmichael, CA 95608
Hours 7:30am - 5pm M-F VISA & MC accepted

Please circle 33 on the Reader Service Card

TREE CARE INDUSTRY - AUGUST 1991
holes which are interconnected by trenches and are partially covered with bricks or paving blocks) can considerably reduce compaction related root problems.

**Inadequate growing space**

Fast growing trees or those that eventually reach large sizes are often encountered in areas where they are going to be confined by limited growing space. This not only poses a problem for the tree, but often results in property damage as well. Roots may grow into sewer pipes or septic system drainage lines, can cause buckling of steps and sidewalks and may damage building foundations. The root system confined by man-made barriers may begin to coil around the trunk, effectively girdling the tree. If this problem is noticed early enough, you may be able to save the tree by cutting the girdling roots at or below the soil line. You may also need to educate homeowners on planting locations of trees that will likely outgrow the chosen site. Inform your client that the root system often grows far beyond the spread of the crown.

**Mechanical damage**

One of the most frequently encountered—and one of the most easily avoidable—stress situations affecting trees is mechanical damage. Injuries may range from lawnmower and weed trimmer damage to poor pruning practices, vandalism and construction damage. Mechanical “weed whackers” are especially notorious because their fast moving nylon or metal cutting lines can rapidly strip the bark off the tree. Young trees, with their thin bark, can be killed quickly by these machines.

Improper pruning practices can lead to big problems down the road. Protruding branch stubs are often starting points of decay because the tree can not heal the injury properly. Branches also should not be cut flush with the trunk because this creates a large bark wound which takes a long time to close. Research by tree pathologists at U.S. Forest Service laboratories and at several leading universities has shown that branches should be cut at a slight angle, using the branch bark ridge as a guide.

“Topping” of trees, where the top of the tree was simply cut off, used to be a fairly common procedure that is still occasionally encountered. Once primarily practiced by utility maintenance companies to keep trees from growing into power lines, this very damaging procedure is now done mostly by uninformed homeowners. Topping causes excessive crown loss that results in loss of vigor. It also exposes large branches or the main trunk to potentially fatal decay problems. The practice also often
backfires, since the tree may begin to sprout new branches just below the cut tops, leading to a more severe problem of utility line obstruction.

Mechanical damage to trees frequently occurs during home construction. Injury can range from "bulldozer blight" to soil compaction by heavy machinery. Partial exposure of the root system during foundation work may kill the trees. Alternatively, partial burial of the trunk by deposition of excavated soil may "suffocate" the tree. Disturbance of the soil profile during construction can lead to serious nutritional problems for trees that are planted in excavated and back-filled sites.

**Salt damage**

De-icing salt applied to streets, highways, and sidewalks often injure susceptible tree species. While some trees tolerate road salts fairly well, white pine, Norway spruce, blackgum and sugar maples are very sensitive to these salts. Salt can accumulate on foliage or in tissues, interfering with the normal functioning of plant cells and causing water deprivation of root tissues. Symptoms of salt damage vary from species to species but generally the tips of conifer needles turn brown and injured needles fall off. In broad-leaved hardwoods, the edges of leaves often turn brown, and small twigs and branches are sometimes killed. A good indicator of salt damage is that the symptoms are severe on the street-facing side of the tree, while the other side is usually less affected.

**Managing urban trees**

Management of urban trees includes both preventive practices and treatment of existing problems. Many of the stresses created by human activity are avoidable or correctable. Always ask questions before attempting to work on trees. Find out as much as you can about the source of the tree, its growth history, and about its growth conditions. Consider the site factors in the overall treatment or procedures performed. In cooperation with the homeowner or property manager, you can greatly increase the odds in favor of the beauty, productivity and longevity of urban landscape trees.

---

Steven Jakobi is a consulting plant pathologist in Concord, Massachusetts, and teaches biology at Massachusetts Bay Community College. A native of Budapest, Hungary, he received his bachelor's in biology from the University of Cincinnati and his master's at West Chester University in Pennsylvania. He worked at Temple University in Philadelphia in cancer research and as an animal facility supervisor and at the Medical College of Pennsylvania as a histotechnologist. In 1984 he was accepted into the doctoral program in plant pathology at West Virginia University, where his research focused on chestnut blight and its causal agent.
DISCOVER YOUR SOURCE FOR PROFESSIONAL QUALITY TOOLS SINCE 1968...

Because we know that proper care of your gardens is a top priority, American Arborist Supplies is YOUR SOURCE FOR PROFESSIONAL QUALITY TOOLS.

We know that your time is valuable and our knowledgeable sales staff is here to help you locate hard to find Arboricultural items and SHIP YOUR ORDER THE VERY SAME DAY YOU CALL, TOLL FREE (before noon E.S.T.)

DISCOVER YOUR SOURCE TO OVER A MILLION DOLLARS OF AVAILABLE INVENTORY AND DISCOVER AN OLD FRIEND IN THE ‘GREEN’ INDUSTRY...

AMERICAN ARBORIST SUPPLIES

CALL TOLL FREE TODAY to order our complete 130 page catalog featuring Hydraulic and Pneumatic Pruning Equipment, Chippers, Sprayers, Hand Tools, Insecticides and Herbicides, Books, Hardware, Diagnostic Equipment and MUCH MORE.

IN PA: 800-352-3458
OUTSIDE PA: 800-441-8381
FAX NO: 215-430-8560

VISA
MasterCard

INDUSTRY ALMANAC

Sept. 5-7
ISA/Rocky Mountain Chapter
Lewiston, Idaho
Contact: John Duke, 303-425-0814

Sept. 21-23
Sustainable Forests,
Modern Arboriculture
Featuring Dr. Alex Shigo
Ukiah, Calif.
Hopland, Calif.
Contact: John Phillips, 707-459-3015

Sept. 22-25
Society of Municipal Arborists 27th Annual Meeting and Trade Show
Niagara Falls, N.Y.
Contact: John Sosnowski, 313-935-3227

Sept. 26-29
Green Industry Golf Challenge
Myrtle Beach, S.C.
Contact: Laurel Treamer, 603-673-3311

Oct. 17-19
American Society of Consulting Arborists Annual Conference
Albuquerque, N.M.
Contact: John Duke, 303-420-9554

Oct. 20-22
ISA/New England Chapter
West Springfield, Mass.
Contact: Bonnie Moran, 203-746-3014

Nov. 3-7
Arbor Expo - 91
Springfield Civic Center
Springfield, Mass.
Contact: Arbor Age magazine, 818-781-8300

Nov. 7-9
A New Tree Biology,
Featuring Dr. Alex L. Shigo
Appalachian State University
Boone, N.C.
Contact: 704-262-3045, or Jim Rice (evenings and weekends), 704-264-4882.

Nov. 5-7
TCI Expo 91
The Ohio Center
Columbus, Ohio
Contact: Thomas Clancy, 800-733-2622

Please circle 3 on the Reader Service Card

From the Roots to the Tops,
Agrotec Delivers!

Priced from $1352*

Agrotec delivers the most complete line of sprayers with parts and customer service that is second to none! Our sprayers are well known for their reliability and long life. Call today for free literature and price information.

Buy Direct and Save 20%!
If we don't have a dealer in your area, you can buy direct from our factory and save 20% off our retail prices. We'll even pay the freight!

*Price includes discount. Hose, reel and hand gun not included.

Call 1-800-638-9363 ext. 302

Agrotec
WE ARE THE SPRAYER PEOPLE
P. O. Box 49 • Pendleton, NC 27862 • FAX 1-919-585-1023

Satisfaction Guaranteed

Please circle 1 on the Reader Service Card
Olathe Manufacturing, Inc., introduces the Model 864 wood and debris chipper, a portable, diesel or electric powered chipper that reduces the volume of bulky wood and lumber products. The 5-foot-plus feed opening can handle whole pallets, limbs, branches and other wood debris. It can be used alone or as part of the Olathe Wood & Organic Recycling System. For more information contact Olathe Manufacturing, Inc., 100 Industrial Parkway, Industrial Airport, Kan. 66031. Phone: 913-782-4396.

Agrotec Inc., introduces new tall tree and lawn care sprayers that can be mounted on skids or running gear for every spraying need from tall trees to golf greens. Tank sizes range from 100 to 1000 gallons with pressures ranging from 70 to 700 PSI. Various pump options are also available, including the cast-iron piston pump with ceramic cylinders or pistons. High volume directional handgun is standard. For further information call or write Jill Gibson, Agrotech, Inc., P.O. Box 49, Pendleton, N.C. 27862-0049. Phone: 800-638-9363.

Howard Leight Industries introduces the QT850, "hands-free PTT," a new concept in communicator/hearing protection. By lifting a shoulder or tilting your head to the side, you activate the system. The PTT clicks when you push it, signaling that you are ready to communicate. Three components are needed to make a complete system: the headset, the radio and the connecting cable. Hard hat styles available. For further information contact Howard Leight Industries, 28 Levering Circle, Bala Cynwyd, Penn. Phone: 215-667-6046.
HELP WANTED

Small, growing tree care company is accepting applications for a crew supervisor and an experienced tree climber, both preferably with degree in arboriculture or related field. Benefits dependent on qualifications. Tremendous potential for advancement. Send resume to:

The National Arborist Association invites everyone to participate in the third annual “Green Industry” golf challenge in Myrtle Beach, South Carolina, September 26-29, 1991, for the benefit of the National Arborist Foundation. There will be prizes for all plus fun and fellowship.

Entry fees are $230 per person for three days of golf, hospitality room, awards lunch on Sunday plus much more. Rooms are $85 per person for a four person condo and $131 for a single.

This special event is limited to the first 32 registrants so register early!

For more information contact Laurel Treamer at 1-603-673-3311.

Paul Bunyan Tree Service

Jones Tree Service, 717 Meadowview Road, Bristol, TN 37620.

Sales representatives: Seeking ambitious individuals, college degree in horticulture or a related field. Previous sales experience is a plus. Good salary plus commission and benefits. Send or FAX your resume with salary requirements to: Almstead Tree Co. Inc., 58 Beechwood Ave., New Rochelle, NY 10801. FAX: 914-576-5448 Phone: 914-576-0193.

Salesman/supervisor - Tree service in Palm Beach County, Florida, looking for motivated and knowledgeable individual to sell work and supervise crews. Experience required, college courses helpful and must be familiar with subtropical trees. Excellent opportunity to grow with a progressive and rapidly expanding company. Send resume and pay history to PO Box 8373, Jupiter, FL 33468-8373.

Tree health sales representative - Our company’s growth is exciting - in 1989 Mr. Trees was one of the Inc. 500 fastest-growing small businesses in America. We are looking for an individual with top skills and knowledge, enthusiasm and commitment. We offer top pay and benefits and the opportunity to grow with us. We are located in beautiful Marin County - just north of San Francisco, a great place to make your home. Mr. Trees, P.O. Box 1609, San Anselmo, CA 94979. Phone: 415-485-1180.

We are a Midwestern full-service tree care company with a commitment to growth and personal development and we have positions available in all phases of the tree care industry. If you are a self-starter with experience in tree care, then we may have the position for you. We offer an outstanding benefit package plus relocation assistance. Send resume with salary history to Josie Grosse, c/o Hendricksen, The Care of Trees, Inc., 2371 S. Foster Ave., Wheeling, IL 60090.

FOR SALE

Used equipment: Demonstrator Bandit Model 30 drop spout (portable) with Wisconsin 30-hp engine; 1984 Morbark Eeger Beaver with Ford 4.23 gasoline engine; 1986 Morbark Eeger Beaver with Cummins diesel; 1988 Model 200+ Brush Bandit with Hercules G-1600 gasoline engine; 1988 Vermeer chipper
with 80-hp Perkins 4.236 diesel engine, unit has 271 hours. For further information, contact Bandit Industries, Inc., 517-561-2270.

Well-established tree service on north side of Houston. All equipment and loyal client list included. Gross income $236,000 in 1990. Asking $115,000. Serious inquiries only to TCI, P.O. Box 1094, Amherst, NH 03031, Dept. SBJ


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 hours.

Tree service - Established 8 years, truck w/dump, splitter, shears, saws, much more. Phone # transferred, $8500. Denver, Colo. Phone: 303-433-2496.


Bucket truck - 1982 Hi Ranger on 1982 Ford F-800, 8.2 liter Detroit diesel, low mileage, 5/2 transmission. Truck and bucket both in excellent condition. $34,500. Phone: 516-751-2086.


Four 1986 50' Aerial Lift bucket trucks w/15 yd Arbortech chip boxes, V8, 5&2, excell. cond., low miles. Phone: 203-938-3629, eve.

A new team: Specially designed AirCUT compressor and impressive Aqua-Life deep root injector. Do the roots and pruning at the same time. Contact your local arbor supply or call 213-821-4131 FAX: 213-822-1360. Complete financing. Watch for Los Angeles demo dates.


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. Phone: 203-226-4335.

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, NH 03031
FINALLY... A deep-root fertilizer that has the benefits of controlled-release nitrogen AND the ease of liquids...

**ArborFlo**

ArborFlo 16-3-3 (55% CRN) is a quality controlled-release clear liquid fertilizer ideal for surface, deep-root, and irrigation feeding of ornamental trees and shrubs. Using ArborFlo eliminates the need for handling soluble products that tend to cake and settle in your tank. You owe yourself the opportunity to try the liquid concept!

Available in 5 gallon containers, 55 gallon drums, and mini-bulks.

Call or write today for prices and information.

**Moyer & SON INC.**

P.O. Box 198 • Souderton, PA 18964
(800) 345-0419 • (215) 723-6001
FAX (215) 721-2800

---

**LIST OF ADVERTISERS**

<table>
<thead>
<tr>
<th>Reader Service Number</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>26</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>3</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>12</td>
</tr>
<tr>
<td>8</td>
<td>25</td>
</tr>
<tr>
<td>9</td>
<td>28</td>
</tr>
<tr>
<td>10</td>
<td>29</td>
</tr>
<tr>
<td>11</td>
<td>31</td>
</tr>
<tr>
<td>12</td>
<td>21</td>
</tr>
<tr>
<td>13</td>
<td>12</td>
</tr>
<tr>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>15</td>
<td>24</td>
</tr>
<tr>
<td>16</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reader Service Number</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td>22</td>
<td>28</td>
</tr>
<tr>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>24</td>
<td>9</td>
</tr>
<tr>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>28</td>
<td>24</td>
</tr>
<tr>
<td>29</td>
<td>21</td>
</tr>
<tr>
<td>30</td>
<td>19</td>
</tr>
<tr>
<td>31</td>
<td>7</td>
</tr>
<tr>
<td>32</td>
<td>Back Cover</td>
</tr>
<tr>
<td>33</td>
<td>23</td>
</tr>
</tbody>
</table>

*Circle this number on Reader Service Card for more information on this advertiser.*
there’s no playing around when it comes to spraying insecticides

You take every precaution. You train your applicators. You educate your customer. Still, in the back of your mind, you have concerns...

That’s why it doesn’t pay to take chances with anything but Pyrenone® Crop Spray insecticide. Pyrenone’s broad spectrum of activity makes it ideal for combating a wide variety of destructive insects on all kinds of trees and shrubs.

And Pyrenone is a good choice for another reason—Pyrenone contains natural pyrethrum which is derived from chrysanthemums, and piperonyl butoxide, which is derived from sassafras plants and increases the effectiveness of pyrethrum. Both ingredients are photodegradable and non-persistent so Pyrenone is easy on the environment, the applicator and the next-door neighbor.

What’s more, you can tank-mix Pyrenone insecticide with most any insecticide to enhance the control of large infestations or difficult to control pests.

Make Pyrenone insecticide part of your pest management program. Call or write for a free brochure or the location of your nearest Pyrenone distributor.
Ladders and Love Knots

By John Hailer Jr.

We expected no special difficulty when we were sent out to remove a dead tree in a back patio. A removal is a removal, but we should have known that nothing is routine in the tree business. Every job is different and challenging; no two problems are ever alike.

The building was formerly a two-story residence converted to a real estate office in the downtown area of a Texas city. As the city grew, once-spacious gardens were sacrificed to make way for the high-rises that surrounded the patio, cutting off all access except through the original building. The patio looked more like an abandoned well.

As soon as we saw the tree our hearts sank. It was dead - dry as a bone and loose in the ground. A large alder, it had been killed by lack of water, huge growths of mistletoe and general neglect. It towered 50 feet above us, its bleached limbs outspread. I pushed against the barkless trunk and felt it tremble. This was no tree for climbing, nor would it support the weight of a man at the top of a ladder.

"Any ideas?" I asked the men on my crew.

Their answers included a crane, a sky hook, a helicopter, a balloon and a scaffold. One of the men suggested just pushing it over, but the windows on the surrounding buildings canceled that idea.

Then I thought of "Bertha," a 40-foot aluminum extension ladder my father had bought from a national retail chain in the 1960s. Almost every one of its rungs showed damage from the impact of falling wood, but the welds were firm and the side rails were as strong and solid as ever.

Now we had to figure out how to get Bertha to the patio. Going through the building's maze of hallways, stairways and offset doorways was out of the question; over the roof was the only solution.

Although the roof sloped at a steep angle, we made it by lashing single-section ladders together, letting one hang down each slope, roofer style, then pulling Bertha up and lowering her into the patio.

"Now what?" asked one of the men.

"As soon as Bertha leans on the alder, it'll fall over."

"Then we won't let her touch it," I replied.

What I had in mind I had never tried before, but I thought it might work. We tied three ropes to the top of Bertha's lower section and three more to the top of her upper, movable section. Now we needed something to tie the other ends to.

"Get the earth anchors," I directed.

One of the men went back to the truck and returned with three 36-inch screw-type earth anchors, the kind with a split disk at the lower end and a large eye at the upper. Screwing them into the ground at the appropriate spots - one in a center location and each of the others a little to the side of center to form a V-shape - we were ready to position the ladder. Setting its base near the tree's base, we ran up the movable section so that it would be as close as possible to the upper part of the trunk without actually touching it. We then secured all six ropes, the lower ones through the eyes of the anchors and the upper ones knotted around these. To prevent backward toppling, we wedged a long pole with a fork at its end against the lower section about half way along its length.

I climbed up this improvised boom, tied myself to it with the safety strap, started my saw and began the dismemberment. The ground men adjusted the old ladder's lean from time to time by alternately loosening and tightening the ropes as I worked away at full speed. In short order, the top and major branches were on the ground. When I had worked things down to about the 18-foot level, I descended. We took the ladder down and pushed the rotted trunk over.

The only remaining problem was removing the wood. Cutting the branches into 8-to-10-foot lengths, we took them out over the roof, forming a human chain and passing the long pieces from hand to hand. We then cut the trunk into manageable rounds and carried them through the building.

The job done, we took Bertha back over the roof and loaded her on the truck. On the way home, we bought a pink ribbon, fashioned it into a large love knot and perched it on Bertha's top rung.

John Hailer Jr. is employed by the John M. Hailer Tree Service Co. in Modesto, California.

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 publication.
DISC? OR DRUM?

You Make The Choice —

WOOD/CHUCK® Makes 'Em Both!

The Wood/Chuck Chipper Corporation has built chippers for over 20 years and knows that different styles of chippers are needed. If you need landscape quality chips, a controlled feed rate and chip up to 12 inch material, the Disc is for you. However, if you require a fast feed rate with material up to 6 inches, economic design and low life cycle cost, then the Drum is your buy.

We make them both. Call the Wood/Chuck sales department for your nearest dealer and let us help with your next chipper purchase.

1-800-438-0671

Dennis A. Beam III
Vice President

Wood/Chuck Chipper Corporation is a subsidiary of D.A. Beam Enterprises, Ltd., and is affiliated with Aerial Devices, Inc., manufacturer of the "SkyRider" and Safety Test and Equipment Co., Inc.

P.O. Drawer 400, Shelby, North Carolina 28150
FREE CHIPS.

You provide the brush. We deliver the chips. With a demonstration from any one of three quality-built Vermeer Brush Chippers. Just choose the chipper that fits your operation.

620 - Handles branches up to 6 inches in diameter. Automatic, hydrostatic feed. 19 hp engine. Ideal for smaller operations and rental.


1600A - Heaviest-built conventional drum-style machines on the market. Powerful engine with unique instant-feed stopgate.*

*optional

Vermeer Manufacturing Co.
New Sharon Road
Pella, Iowa 50219 U.S.A.
800-829-0051
In Iowa (515) 628-3141

“THE DIGGIN’ DUTCHMAN”
Vermeer
The Quality Shines Through...

Please circle 32 on the Reader Service Card