ALL TERRAIN AERIAL LIFTS

The most awesome, compact, versatile, self-propelled, Indoor/Outdoor, All Terrain Tracked Aerial Lift available today!

- 80ft. working height
- 35ft. horizontal • 34.5in. wide
- Fits thru a 36in. gate or door
  - Indoor/Outdoor use • Fully Insulated (46kv) option • Articulating
- Electric and/or Diesel Power • High strength steel booms • Auto leveling
  - Extremely low ground pressure • High speed mode
- ANSI, OSHA & CSA compliant • CA emission exempt • Quality built in USA!

- Go anywhere! All units towable behind a pickup truck!
- Get the competitive edge over everyone else!
- Go where no one else can go! • Do safely what no one else can do!

allterrainaeriallifts@gmail.com • (559) 225-8000
THE BEST DEFENSE IS A GOOD OFFENSE

Mauget insecticides – Abacide 2, Imicide, Inject-A-Cide, Inject-A-Cide B, Abasol, and Imisol – have defended trees against pests like Emerald Ash Borer, leafminers and caterpillars for more than 50 years. Abacide 2 Hp and Imicide Hp are now available in 1 liter Liquid Loadable containers.

Mauget’s new insecticide, TreeAzin, is an OMRI-listed bioinsecticide formulated with azadirachtin, a natural neem seed extract. Like its product line, Mauget’s legacy of proven, innovative chemistry continues to grow.

The Right Way To Treat A Tree
Reclaiming Green for the Green Industry

To achieve your goals in Washington these days, it helps to justify your agenda by connecting it somehow to creating jobs or a positive “green” result. The first stimulus bill that passed Congress included significant funding for green jobs, most related to construction or energy in one form or another. Renewable energy sources, such as wind, solar and geothermal, fared well in the bill, as did energy conservation measures, such as weatherization, insulation and installation of replacement windows.

Missing from all of this activity were the undeniable job creation and energy conservation benefits of planting, maintaining and protecting shade trees.

The Sustainable Urban Forests Coalition is trying to change that. A coalition of national organizations, the SUFC includes:

- The Alliance for Community Trees; American Forests; American Nursery and Landscape Association; American Planning Association; American Public Works Association; American Society of Consulting Arborists; American Society of Landscape Architects; Arbor Day Foundation; International Society of Arboriculture; Keep America Beautiful; National Association of Conservation Districts; National Association of State Foresters; Society of Municipal Arborists; Society of American Foresters; Davey Tree Expert Co.; Tree Care Industry Association; TreeLink; U.S. Conference of Mayors; Utility Arborist Association; National Recreation and Parks Association; U.S. Forest Service; U.S. Forest Service, Cooperative Forestry; College of Forest Resources, University of Washington; and National Urban and Community Forestry Advisory Council.

Together, the SUFC is working to raise the national profile of urban forests, their benefits, and the people who help keep urban forests healthy. You.

TCIA and the organizations above are asking for your support for some true green-jobs legislation that will enhance the environment and advance the tree care industry.

Many urban and suburban areas are suffering from deteriorating community infrastructure, limited green spaces, poor health and chronic disease. Urban green spaces with trees reduce storm water runoff and pollutants, enhance groundwater recharge, reduce urban heat island effects, and reduce energy demands. The Urban Revitalization and Livable Communities Act (H.R. 3734) will invest in the health and well-being of urban park and recreation agencies through federal assistance grants (which must be matched with local funds) to rehabilitate existing, and develop new, urban parks and recreational infrastructure. The grants would promote environmental stewardship, sustainable landscape features and increased tree planting.

A second piece of legislation targets energy demand. Today, the utility sector is the largest single source of greenhouse gas emissions in the U.S., producing approximately one-third of the country’s emissions. The urban heat island effect is responsible for 5 percent to 10 percent of peak electric demand and as much as 20 percent of population-weighted smog concentrations in urban areas. The U.S House of Representatives passed the American Clean Energy and Security Act (H.R. 2454) with Section 205 (Energy Conservation Through Trees). This provision supports conserving energy by planting shade trees in strategic locations around residential and commercial structures in order to reduce energy demand. This approach is smart, efficient and will encourage local partnerships between energy providers, municipalities, state and local agencies, tree-care professionals and community-based organizations.

For more information on these bills, go to the government section of www.tcia.org.

Green buildings are very trendy these days, and there is certainly nothing wrong with finding ways to build more energy efficient buildings that leave a smaller footprint on the environment. But let’s not miss the fact that turning a 10-acre field or wooded area into a Wal-Mart is hardly a heroic advance for the environment – no matter how many green principles the developers follow. Planting and maintaining healthy, mature shade trees helps to deliver cleaner air and water, reduce energy use and provide health and wellness benefits to the 80 percent of Americans who live in urban areas. There is no downside. We urge TCIA members and the tree care community at large to contact their representatives in Washington in support of sustainable urban forests.

Mark Garvin
Publisher

TCI’s mission is to engage and enlighten readers with the latest industry news and information on regulations, standards, practices, safety, innovations, products and equipment. We strive to serve as the definitive resource for commercial, residential, municipal and utility arborists, as well as for others involved in the care and maintenance of trees. The official publication of the non-profit Tree Care Industry Association, we vow to sustain the same uncompromising standards of excellence as our members in the field, who adhere to the highest professional practices worldwide.
Looking for the most value in a 12-inch chipper? Look no further. RAYCO’s new RC1220 delivers the most for your dollar. Start by comparing RAYCO’s 2x6-inch box tubing frame to the competition. Then note the planetary drive motor that powers the feed wheel, delivering plenty of feeding power with virtually zero maintenance. Productivity features like a 20-inch feed wheel that walks over most logs without the need for operator assistance and a 12-inch high by 20-inch wide infeed opening save you time and money while on the job. RAYCO’s exclusive X-Charge discharge system provides better throwing characteristics. X-Charge gives you tighter chip packing for fewer trips to unload, and less dribble between the chipper and truck, saving clean-up time. For more information on the RC1220 or other RAYCO products, contact us at 800-392-2686 or contact your Authorized RAYCO Dealer.

www.raycomfg.com : 800.392.2686
Circle 21 on RS Card or visit www.tcia.org
APRIL

Features

8 Who is Making Money on the Asian Longhorned Beetle?  
By Don Staruk

14 License to Trim: New Jersey Opt for Arborist Licensing  
By David Rattigan

24 CSI 101: Diagnosing Health Problems of Woody Plants  
By Darcy Maulsby

26 Crane Safety – An Operator’s Perspective  
By Joseph W. Birkbeck III

Departments

2 Outlook  
By Mark Garvin  
Support sustainable urban forests to help regain “green” moniker for tree care.

17 Letters & E-mails

18 Cutting Edge  
New products and services, and news in the tree care industry.

20 Industry Almanac  
Important regional and national meetings and activities.

22 Washington in Review  
By Peter Gerstenberger  
OSHA takes another look at tracking work-related musculoskeletal disorders (MSDs).

ON THE COVER: John Hanel, left, and Kevin Cleveland, climbers for TCIA member Tree Tech Inc. of Foxboro, Mass., remove distressed red pines during a Mass. Arborists Association volunteer day at the Crane Estate in Ipswich, Mass. They were working from the crane of another TCIA member company, Maltby & Company Inc. of Stoughton, Mass.

Copyright 2010 by the Tree Care Industry Association. All rights reserved. Reproduction in whole or in part without written permission is prohibited. The Tree Care Industry Association is dedicated to the advancement of commercial tree care businesses. Reference to commercial products or brand names in editorial does not constitute an endorsement by Tree Care Industry Magazine or the Tree Care Industry Association. Tree Care Industry (ISSN 1059-0528) is published monthly by the Tree Care Industry Association, 136 Harvey Road-Suite 101, Londonderry, NH 03053-7439. Subscriptions: $40 per year, $4 per single copy. (Canadian/International orders $60 per year, U.S. funds; $6 per single copy); or a member benefit for TCIA members. Periodicals postage paid at Londonderry, N.H., and additional mailing offices. POSTMASTER: Send address changes to Tree Care Industry, P.O. Box 3030, Langhorne, PA 19047.
LET YOUR CHIPPER DO THE TALKING.

Model 990XP This 12" capacity drum-style chipper from Bandit Industries, Inc. features a compact 24" diameter drum and weighs in just under 5,200 lbs., making it an ideal lightweight chipper for municipalities, tree services, and rental contractors.

Actions speak louder than words. That’s why more industry professionals trust their tree care jobs to Bandit chippers. All Bandit chippers feature the industry-best 5-Year “GUTS” Warranty, our optional MasterTrak Productivity Package, and are backed by our dedicated team of factory sales and service staff. Because it’s not just about the equipment—it also has to work.

So let our chippers do the talking: Check out our complete video library and see for yourself how Bandit can make your operation more productive today at www.youtube.com/banditchippers.

Circle 4 on RS Card or visit www.tcia.org

WATCH IT RUN!

SEE BANDIT’S COMPLETE LINE IN ACTION:

www.youtube.com/banditchippers

Bandit INDUSTRIES, INC.

6750 Millbrook Road • Remus, MI 49340 • USA

FIND US ONLINE
1-800-952-0178
By Don Staruk

As much as arborists and tree care company owners want to do the right thing when it comes to killing off invasive pests such as the emerald ash borer and the Asian longhorned beetle, no one will deny that there is money to be made on these infestations.

When an invasive insect or disease occurs in an area, the smart tree care company owner is going to figure out how to get some of the local business controlling or eliminating it. It was true for the Dutch elm disease and countless others in the past, and it is true for the EAB and ALB today. The U.S. Department of Agriculture’s Animal and Plant Health Inspection Service (APHIS) will readily admit that they are not even trying to catch up with the EAB – the cat is out of the bag, so to speak, on that one – mostly due to the fact that it moves too fast. The good news with EAB is that, for the most part, it only attacks ash trees. The ALB is a different case on all counts.

While the ALB (*Anoplophora glabripennis*) has a dozen known host tree genera – many of which flourish in the North Central and Northeastern U.S. and, therefore, is a greater threat for damage in these areas – it moves much more slowly.

**History**

ALB has been found in four U.S. states since 1996, when it was first discovered in Brooklyn, New York, and one location in Ontario, Canada. The USDA declared eradication of two ALB infestations in 2008: in Chicago, Ill., and Hudson County, N.J.

In New Jersey, in Hudson County, ALB was first detected in 2002 and was deemed eradicated in April 2008. There, 113 infested trees and 348 high risk host trees were removed. In Middlesex/Union Counties, it was first detected in 2004 and 616 infested and 20,904 high risk host trees were removed. While it has not been deemed eradicated there, the last detection was in August 2006.

In Illinois, ALB was detected in 1998 and the Chicago infestation (35 square miles quarantined and 61 square miles considered infested) was declared eradicated in April 2008. In August 2008, an ALB adult beetle was reported in Deerfield, Ill., and 616 infested and 20,904 high risk host trees were removed. While it has not been deemed eradicated there, the last detection was in August 2006.

In Illinois, ALB was detected in 1998 and the Chicago infestation (35 square miles quarantined and 61 square miles considered infested) was declared eradicated in April 2008. In August 2008, an ALB adult beetle was reported in Deerfield, Ill., and 616 infested and 20,904 high risk host trees were removed. While it has not been deemed eradicated there, the last detection was in August 2006.

In Illinois, ALB was detected in 1998 and the Chicago infestation (35 square miles quarantined and 61 square miles considered infested) was declared eradicated in April 2008. In August 2008, an ALB adult beetle was reported in Deerfield, Ill., and 616 infested and 20,904 high risk host trees were removed. While it has not been deemed eradicated there, the last detection was in August 2006.
12 miles north of the previously quarantined area. More than 9,000 trees were subsequently inspected and no other beetles were found, and DNA analysis found that that beetle was genetically different from the Chicago population.

In New York, there is a 142 square mile regulated area, with an expansion of 10 square miles in Staten Island due to the detection of additional infested trees. Only small pockets of infestation have been detected in the last few years (In 2009, five infested trees in Queens and seven in Staten Island). In Islip and Manhattan, no ALB have been detected since 2002 and 2005, respectively.

But the Massachusetts infestation, which was found in August 2008, has the potential to be the largest yet.

**Massachusetts**

The regulated quarantine area in Massachusetts is currently 74 square miles and still expanding. Indications are that ALB has been in Massachusetts for at least 12 to 15 years, and that it might be the largest infestation to date in terms of trees affected. Close to 27,000 trees have been felled so far, and there are 750,000 to 800,000 potential host trees in the current quarantine area.

“This took us 10 years to eradicate the

**Host trees currently in quarantine:**

- **112,000 in New Jersey**
- **350,000 in New York City**
- **750,000+ so far in Mass.**

Chicago infestation, so you’re looking at at least that much time for us to eradicate the (ALB infestation) here in Massachusetts.”

Christine Markham, APHIS’ national director for the ALB Eradication Program, said during a presentation at the Ecological Landscape Association conference in Springfield, Mass., in February.

The science is pretty straightforward. The ALB is a round-headed borer that chews its way into and around the cambium of the tree and lays its eggs. The larvae hatch, burrow into the heartwood of the tree and, once mature, chew their way out using a different route. These borings can compromise the structural integrity of the branches, limbs or trunk long before they kill the tree by cutting systemic flow of water and nutrients. (One removed tree had more than 800 exit holes in it, according to Markham.) There are treatments to protect uninfested trees, but little-to-no hope for a tree once ALB is found in it, says Markham.

### Total Trees Removed Due to ALB

<table>
<thead>
<tr>
<th>State</th>
<th>Infested Trees</th>
<th>High-Risk Trees</th>
<th>Total Trees Removed</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>6,274</td>
<td>12,187</td>
<td>18,461</td>
</tr>
<tr>
<td>Illinois</td>
<td>1,551</td>
<td>220</td>
<td>1,771</td>
</tr>
<tr>
<td>New Jersey</td>
<td>729</td>
<td>21,252</td>
<td>21,981</td>
</tr>
<tr>
<td>Mass.</td>
<td>15,875</td>
<td>10,250</td>
<td>27,125</td>
</tr>
<tr>
<td>TOTAL</td>
<td>25,488</td>
<td>43,909</td>
<td>68,337</td>
</tr>
</tbody>
</table>

The USDA has an integrated approach to eradicating the ALB in general, though specific practices may differ for different locales. While the broader integrated approach includes regulation, legislation and education, the practice on the ground is to survey and quarantine within 1½ miles of any sign of ALB. No host-tree wood goes in or out of the quarantine area, including firewood (all hardwood firewood, as it is difficult to identify species of cut wood) and any other host tree waste or nursery stock. If a tree has any sign of ALB in it, on it or around it – even just a beetle feeding on a leaf – cut it down, grind out the stump to 8 inches below ground, and reduce all the waste to chips less than 1 inch in two dimensions. (USDA/APHIS has determined that is the chip size in which the larvae cannot survive.) Chemical treatment is only for non-infested trees.

“This is an eradication program. Infested trees have to be removed,” says Markham, reiterating that even one beetle feeding on a leaf is considered an infestation.

In Worcester, Mass., a staggering 92 percent of potential host trees were removed in the core infestation area during winter 2008-09. Entire neighborhoods of once tree-lined streets have been laid bare. The city and state have replanting programs underway, but it will be decades before any residents see shade or feel any of the other benefits of mature trees on their properties in these areas, or before tree care companies have much work there. The effects of the 2008 cutting were both immediate and longer term. While items such as roof and siding shingles quickly fell victim to increased winds due to the greater exposure, things like more potholes and erosion are being attributed by some to increased runoff of rain and snowmelt this spring.

But back to the original question: Is there money to be made in this battle and who is getting the work?

### $41.5 million infusion

For starters, yes, there is money to be made. APHIS in January received an additional $41.5 million in USDA emergency funds (Commodity Credit Corporation) to battle ALB in Massachusetts. This follows an initial $24.5 million in USDA emergency funding last year (winter 2008-09), and $13 million in USDA (Agriculture Appropriations Act) funds already appropriated to fight the Massachusetts infestation this year. That is a total of $54.5 million to fight ALB in Massachusetts for 2010. The emergency funding will be used

---

**Host trees**

The following tree species are considered to be good hosts for the ALB:

- **Common Name**
- **Genus**

- Maple
- Horsechestnut
- Birch
- Plane-tree
- Poplar
- Willow
- Elm

Other susceptible trees include: Ash (Fraxinus, especially green ash, F. pennsylvanica), Silk tree (Albizia), Hackberry (Celtis), Mountain-ash (Sorbus), and Katsura (Cercidiphyllum japonicum). A complete list of host species is available from USDA APHIS.

---

**Granville Avenue after infested trees were removed. Photo by Kenneth R. Law, USDA APHIS PPQ, Bugwood.org.**
to increase tree surveys in order to determine the extent of the infestation, expand the use of treatments to reduce the beetle population, and ensure the timely removal of infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.

In reality, of that money, the majority will be used for surveying, according to Rhonda Santos, a USDA-APHIS ALB Eradication Program spokesperson. This becomes a bit of a political hot potato, as some politicians in Worcester would rather see more money spent on treatment rather than on surveying. This is partly because, according to the USDA’s own data, ground surveys are only about 30 percent effective, and climbing surveys are only 60 percent effective with lightly infested trees.
town set up a second, separate collection and processing area for street trees and yard waste within the regulated zone. The costs for staffing equipment and operation were reimbursed with USDA/DCR funds. Similar programs are being funded, and creating jobs or preventing layoffs, in other municipalities, Daly says.

Treatment for non-infested trees
As stated earlier, this spring the focus turns from removals to the treatment programs that protect and save uninfested potential “host” trees in the regulated areas. Treatment of ALB infestations has been going on in other areas since 2000, and has involved various protocols, most recently both trunk and basal soil injections of various concentrations of imidacloprid. But in Worcester, due to political pressure stemming mainly from environmental concerns, only trunk injections are going to be employed.

Two companies have been selected to provide the injection equipment and product and, again, TCIA members have not been left out in the cold. TCIA member Arborjet Inc. of Woburn, Mass., will provide its IMA-jet insecticide for use with its “air over hydraulic” microinjection systems. Also, BioForest Technologies Inc. of Sault Ste. Marie, Ontario, Canada, will provide its EcoJect microinjection system. “Arborjet has been working with the USDA and we’re excited that they (are going with) full treatments” in Massachusetts, says Peter Wild, Arborjet president and CEO.

Private contractors will actually do the injection treatments. While the USDA has narrowed down the list of potential contractors, which includes several TCIA members, the contract had not yet been awarded in early March. Among those still in the running for the work, according to one TCIA source, include Bartlett, Davey, Hartney Greymont, SavATree and TruGreen among others.

Description of damage:
- Larvae damage the tree by eating away at the outer sapwood, beneath the bark layer, creating hollowed out galleries in the wood.
- Females chew oval grooves in the bark to deposit their eggs.
- Exit holes \( \frac{3}{8} \)-inch or larger in diameter (6-14mm) appear wherever adults have bored out of the tree.
- Frass may appear on the ground or on tree branches where adults have exited from the tree.
- Wounds caused by the beetles may ooze sap.
Imidacloprid has proven to reduce beetle populations in research completed in the United States and China. It is currently used in the New York ALB eradication program and has been used as part of the ALB eradication activities in New Jersey and Illinois. Imidacloprid is applied each year for three years for ALB eradication, though the USDA is only looking at this current year’s treatment for now.

“The treatment that is beginning this spring is what we are referring to as a “Knock down” treatment, being only a one year program,” says Rhonda Santos. “Since the Massachusetts eradication program is still working on the delimiting surveys, treatment to follow in 2011 and beyond will be impacted by what is discovered through these surveys.”

Because the time frame for treatments is limited to the early spring, the number of trees that can be treated is limited. Beetles will emerge around July 1 in Massachusetts. Treatments are scheduled to start on April 19, with 38,000 trees in areas totaling 3.75-square-miles out of the 74-square-mile quarantine area, targeted for this spring. Potential host trees within ¼ to ½ mile of an actual infestation are targeted for treatment.

Some test trees were treated as part of a pilot program last fall and APHIS will measure the efficacy of those treatments this spring and into this fall. If the fall treatments work, that will open the window for treatments, and lead to more trees being treated, in the future.

Of the $54.5 million set aside for ALB eradication this year, about $4 million to $6 million will be spent on treatment this spring, says Wild. Most of that will go for labor and a portion will pay for product. The USDA already owns Arborjet’s air-over-hydraulic injection devices, he says, and will loan or lease them to the companies contracted to do the work.

“We treating a tree or removing one is a USDA expense and not a homeowner expense,” stresses Christine Markham.

Training and enforcement

Any and all companies and agencies who want work eradicating the ALB, and even companies such as nurseries or landscapers who work in the regulated areas and may run across a beetle or work with quarantined materials, must complete compliance training and show proof of having done so. As of March 2010, 819 individuals from almost as many different companies or agencies had been deemed compliant.

Tree companies need to be aware of and comply with the rules. Just moving waste wood out of the quarantine zone is punishable by fines of up to $25,000 and possible jail time, according to Daly. And, he says, environmental police in Massachusetts have issued some fines and pursued them through the courts.

Replanting

USDA-APHIS, through USDA-Forest Service, gave $500,000 for planting 1,500 trees in Worcester. Those plantings started in spring 2009, with 131 trees planted, and
Bad luck or good luck?

The ALB battle is far from over in Massachusetts and, since it is estimated that ALB has been in the area for at least 12 to 15 years, how far it may have spread around New England remains to be seen. The tree cutting and removal work will continue, no doubt with squalls of activity if and when a new infestation area is discovered, but the most lucrative area going forward promises to be in the treatment of trees, which could go on for years.

With all this activity and all the money drawn to an ALB infestation, especially in a down economy and many businesses facing layoffs, some tree care company owners might be thinking that their counterparts in Massachusetts are lucky to have this in their area.

Think again.

First, most arborists know there is more money to be made caring for trees than cutting them down, because once they are down, they are gone. Second, it is a short term gain. The USDA’s Rhonda Santos says the record shows that an eradication program is usually about a 10-year event. Sure, they will plant a new tree, but it will be a long while before that tree will require much maintenance work.

Third – and there are certainly more than three reasons why this is not a good thing – is that real estate values in the clear-cut neighborhoods appear to have dropped while the cost of heating, air conditioning, exterior maintenance and erosion control have increased. And quality of life issues, such as noise pollution, aesthetics and a lack of wildlife, have been compromised. Just ask those residents in Worcester if they’d like their trees back.

Summary

So who is making the money? The answer seems to be that a lot of people and companies or agencies are getting some. For arborists and tree care companies in the area of an infestation, there is certainly work available, though it may come in bursts or be short term.

Mass DCR’s Daly says his agency has asked a similar question, and that the University of Massachusetts will take on a project to study what economic impact ALB funds have on an area. It will include looking at the impact it has on jobs for municipalities, state and federal agencies and private companies, including tree companies, as well as how that money is spread throughout the local economies.

Resources and references

- [www.massnrc.org/pests/alb](http://www.massnrc.org/pests/alb)
- [www.beetlebusters.info](http://www.beetlebusters.info)

**What can you do?**

To date, every ALB infestation has been discovered by a homeowner or other non-arborist. Somehow, in Worcester, the pest evaded detection by working arborists for at least 12 to 15 years. Is it possible they just were not aware of it? Or were they just not curious enough to look for it? In any case, USDA-APHIS says more, educated eyes out there are the best tool to find and stop further infestation. So here is what to look for.

**Scientific Name:** Anoplophora glabripennis

**Common Names:** Asian Longhorned Beetle, Asian Longhorn Beetle, Starry Sky Beetle

**Key ID Features:**

- The Asian longhorned beetle is 0.75 to 1.5 inches long with antennae that are 1 to 2 times its body length.
- Adults are shiny black with irregular white spots.
- Antennae have alternating black and white bands.
- Feet and antennae may have a bluish tinge.
- Adults are active from early summer through mid-fall.
- Adult females dig bowl-shaped holes in the bark, typically about ½ inch (15mm) in diameter, to bury their eggs in. These “oviposition pits” often appear orange in color.
- Larvae can grow to be 2.4 inches long (60mm), with many-segmented, off-white bodies and brown mouthparts. They burrow beneath the bark and are rarely seen.
- “Frass,” or sawdust/wood shavings, may be apparent around the base of infested trees. Severely impacted trees may have exposed wood where larval feeding galleries (tunneling) is visible.

will continue this spring. The plantings are being coordinated through the Mass DCR.

In early March, Worcester officials said they plan to replace about 2,400 street trees removed after ALB was found in August 2008 or lost to a subsequent December 2008 ice storm. They hope to complete those plantings by the end of 2011.

Mass DCR has also recently obtained $4.5 million in ARRA (American Recovery and Reinvestment Act) funds, or stimulus money, for the replanting efforts in the Worcester area, according to DCR’s Daly. That money will be used to hire foresters as supervisors who will in turn work with volunteer groups and others to get trees planted.
When the acting governor of New Jersey signed the Tree Experts and Tree Care Operators Licensing Act on January 7, 2010, the Garden State joined a growing movement aimed at professionalizing the tree care industry.

The law requires that those who perform tree care services adhere to federal safety standards and carry the appropriate insurance for the work they’re going to be doing. The act is an expansion of the existing tree expert law, which was established in 1940 and was a voluntary certification program.

The problem with the existing law came with the word “voluntary.”

“At that point, only those who voluntarily took the exam and became certified could also be penalized,” explains Stephen Chisholm Sr. of Aspen Tree Expert Co., Inc. in Jackson, N.J.

Chairman of the state’s Board of Tree Experts since 1985, Chisholm was instrumental in getting the new law passed, and over the next few months he’ll be busy traveling the state presenting the details of the new law to tree care professionals.

The licensing movement in New Jersey and elsewhere — supported by the Tree Care Industry Association — is consistently driven by the same motivators. By professionalizing the industry, it will help those within the industry to determine their own futures, and protect their workers.

As Tim Kastning of Grace Tree Service, Inc. in Hayden, Idaho, wrote in a recent letter to TCI Magazine (March 2010), “Until we get some sort of regulation/licensing on a state by state basis, we will continue to be under the scrutiny of OSHA, more workers will continue to get killed, and our profession as professional arborists will continue to be likened to the fellow with a pick-up truck, chain saw and Rottweiler looking for Friday’s beer money.”

In New Jersey, it was the sad reality of a spike in tree-related deaths that spurred the push for licensing. In a two-year period running from 2000-02, there were 18 tree care-related deaths in the state.

“One death is too many, but when you start going above the national average and realize that the tree care industry is in the top five more dangerous professions in the country, anything you can do to make it safer is a good thing,” says Dave Johnson, a regional forester with the New Jersey Forest Service and member of the Board of Tree Experts.

There are a wide variety of ways tree care workers can be injured or even killed, he notes. One way to avoid a serious accident is with better training.

During the course of changing the existing law, it became a true licensing law, with mandated requirements. Following the increase in deaths, the state board — which advises legislators on the industry, under the state’s Department of Forestry — took it upon itself to push harder to revise the state standards.

“When we put this together, it wasn’t just the board of tree experts,” Chisholm says, noting that they didn’t want to force people out of business, or keep them from getting into the business. “The industry itself started promoting this idea.”

Under the previous law, only those who passed the certification could call themselves a certified tree expert, or use the CTE designation. While those with the CTE could use the designation as a selling point, they were also the only people held to the high standard.

Most of the tree care organizations in the state — the Arborist Association of New Jersey, the New Jersey Shade Tree Federation, the Society of New Jersey Certified Tree Experts, the state’s ISA
chapter – supported the new requirement. TCIA staff helped provide technical advice and support throughout the process.

The bill was modeled somewhat after the licensing laws in Maryland, with changes added as issues arose.

“Sometimes, taking time is a good thing because you can get some of the problems of the bill’s language out of the bill before it gets voted on,” Chisholm says. “There were some things, minor or great, that people working on it overlooked.”

Other issues came up as the bill was written, including splitting the licensing: an operator’s license and an expert’s license. The committee is still writing the regulations, and will work on the specifics over the course of this year.

“The bill was looked at as consumer protection/worker protection legislation, giving the consumer an avenue to get proper tree work, proper advice, and get essentially what they pay for,” explains Gary Lovallo, owner of TCIA-member company Chestnut Arboricultural & Forestry Services in Matawan, N.J., and New Jersey ISA chapter representative. “The number one unresolved (consumer) complaint in New Jersey had involved tree services. There were tree services in particular areas that were racking up complaint after complaint and they were unable to do anything to have recourse. That was one of the provisions of the bill; consumer protection.

“The major component of the bill was tree worker safety. Too many people were getting hurt, injured and killed simply from a lack of training. When you look back at the accidents and the investigation that went on, it was climbing past decay pockets, it was not being secured properly, it was cutting through ropes. It was things of that nature; things that could have been prevented had the tree worker and subsequent victim been aware of certain things. Training would have taken care of that.”

As Lovallo and others saw it, there was a correlation between consumer complaints and deaths, because those who had the least training were doing both a shoddy job and less safe job in the field.

“You can call yourself a tree expert,” he says. “You don’t need any qualifications; you don’t need any education. All you need is a truck and some lettering. You can use a crayon and write on the side of your truck, ‘tree expert,’ and people will assume that there’s something with the word ‘expert.’

“The consumer protection falls into that category. Now, that consumer sees the words tree expert and knows that person needs to have a certain level of knowledge, and an ethical code. That’s where consumer protection comes in.”

The law is expected to include a couple of levels of grandfathering – exempting those with other licenses, or those with certain levels of experience.

There are some industries, such as utility line clearance – that is already highly regulated – which were exempted. Landscape companies that work trees below 6 inches in diameter, with no climbing, were also given a pass.

“For the most part, there was no major opposition to it,” says Johnson. “They saw where we were coming from and agreed with the direction we were taking the legislation.”
The license is expected to cost no more than the current $25 per year, and companies won’t be required to have more than one licensed person for a small business, or one licensed employee per branch office for a large company.

“In New Jersey, we pay for a lot of licenses that are meaningless right now — like the business contractor’s license, which is just a revenue raiser for the state,” Chisholm says. “It doesn’t do anything but say you’re a licensed contractor in the state of New Jersey. We’re hoping — and have the deputy district attorney looking into it — that this license can take the place of those licenses.”

Another component requires all tree care businesses to register as such. Chisholm says advocates are trying to limit that to a $100 fee.

Yet another component of the law states that the unpaid board cannot generate more revenues than it needs to operate.

While the law went into effect immediately, it is expected to take a year to fully implement it.

“Between the business registration, which is going to allow us to know who’s out there operating, and the licensing of the individuals, we’re going to definitely increase the professionalism, we’re going to make it a safer work environment for people in the arboricultural industry, and going to have better work come out of it,” says Johnson.

For those who resisted the legislative change, one of the concerns is over-regulation of the industry, or of adding an obstacle during a tough economic time. Rather than force the guy with the chain saw and pickup truck out of business, however, proponents say that licensing invites them to do their work more professionally, and more safely.

The law encourages that person to think differently about the business, Lovallo says. It steers him to a mindset where he might say, “‘OK, I want to do business, but it’s not just going to be cutting away, and slash and burn,’” Lovallo says. “‘If I want to be in this business, I need to get some training, need to get some education, and need to get some experience.’”

Lovallo says that the New Jersey licensing laws can serve as a model for other states, where new laws are being discussed, proposed or are currently in the legislative process. He adds that he thinks they’ll provide measurable success for others in the industry.

“Once the rules and regulations are put into effect and it’s demonstrated that this was not intended to make this a mutually exclusive club, that the rules and regulations are an invitation for those to come in and do better tree work. Once that’s demonstrated, I think other states will jump on board, by seeing the things we mentioned,” Lovallo says.

“For everyone in the industry, tree worker safety is number one. It’s paramount to everything. Once they see that it’s reducing accidents, increasing professionalism and protecting the consumer, they’re going to see that this is a win-win for everybody.”
Please help us help you keep enjoying TCI Magazine!

TCIA exists to help tree care businesses, you, do business better. TCI Magazine is one of the ways we do that.

Q. What can you do to help us maintain our position as the best magazine in the tree care industry?
A. Fill out a subscription card (in every issue) for your FREE subscription every year.

Q. Why?
A. It costs money to publish a high-quality magazine. Advertising support enables us to provide you the highest quality educational, scientific, business and safety articles.

Q. How does filling out a subscription card help?
A. Advertisers look at the number of subscribers who request the magazine by filling out a card. To them, it means people are reading it.

Q. What if you don’t fill it out?
A. We don't look as attractive to advertisers and they may not support the magazine, and the quality of the magazine suffers. Also, after three years you’ll be dropped from the list.

Q. How often should you fill out the card?
A. Once a year would be best. Directly requesting the magazine is the best way you can show advertisers that you are actually reading the magazine. Doing so every year shows them that you are reading it regularly. We show them those numbers.

Q. So, will filling out the card once a year help TCI keep you informed in countless ways that will benefit your career and your business?
A. Yes.

Q. Can we make it any clearer?
A. You tell us.

Fill out a subscription card (in every issue) for your FREE subscription every year. Advertisers look at the number of subscribers who request the magazine by filling out a card. To them, it means people are reading it.

Call back...

Due to an editing error in the March issue, the Cutting Edge Products item on Timberwolf’s TW-C1 log splitter contained incorrect information. The unit is, in fact, a smaller, gasoline-engine powered machine designed as an alternative to an electric machine. The corrected item appears again in this issue, page 18.

Send letters and e-mails to editor@tcia.org

Letters & E-mails

Proposed decay standard needs a second look

I read Christopher Luley’s article entitled “Does the Tree Care Industry Need a Decay Inspection Standard?” (TCI, January 2010) with great interest.

All of his points are well taken. However one part of the article that might confuse the issue is its discussion of an inspection protocol. I believe the protocol should allow for a second examination of a tree, after attempts have been made to save it by means of structural pruning.

My professional experience has taught me that once the presence of decay in an old historic tree is confirmed, and the risk of losing the tree is very real, then structural pruning is the only possible way to save the tree and make it safe – along with bracing, cabling and other preservation efforts.

The inspection standard needs to take into account the degree to which these procedures might reduce the weakened conditions within the tree and make it safer.

So I recommend that a second evaluation, or inspection, be carried out after structural pruning, because it might reach a very different determination about the safety and long-term health and appearance of the tree. This second evaluation might also reach a different determination of the future costs of maintaining the tree. This second evaluation would certainly complicate the inspection protocol, but would be extremely valuable to those making the final decision about whether to save the tree or not.

I hope these thoughts will contribute to future inspection standards for dangerous trees with significant decay, and improve the odds that fine old trees will be saved rather than removed.

Harry Davis
Past Massachusetts Arborists Association president, Retired Certified Arborist
Brooklin, Maine/Boston, Mass.

Kudos for proposed removal job rating system

I’m reading the February 2010 issue of TCI and wish that you would relay my compliments to Murville Alleman, author of “What Kind of Removal Job is it?” (Arborist Forum, page 30). Of the 4,000 trees I have felled since 1992, nine were monstrous. I managed to fell them safely, however, at greater cost and time allotment, usually way over my estimate. I wish I had Murville’s article long ago!

Sherman “Sherm” Anderson
Best Tree Service
Mountain View, Arkansas

Thanks for reasons to read

Thank you for printing Jack Phillips’ great article on tree roots and soil biology, etc. (“Wisdom of Trees III: Bringing Stones to Life,” TCI, February 2010) This is why, in spite of a busy schedule, I still take time to read.

Miki Brawner, arbor culture and design
Harlequin’s Gardens
Boulder, Colorado

Is that a removal or one horrible pruning job?

I enjoy reading your publication each month and I thank you for your information and the ad sources. In the February 2010 issue, on page 54, there is a picture of a tree climber (Nick Ottiger) who seems to be standing on a major lead of a live tree with climbing spurs. That does not follow the guidelines for “No” spurs in living trees. Also, there appears to be a branch union sticking out from a cut that is longer than the climber’s boot (since I did not have any other measure to go by). It states in the article that he trains his company with ANSI A300 standards. In my limited background of 11 years of ISA membership and 40 years of tree study, I cannot seem to find those things as approved techniques. If there is something that I misread or did not see correctly, please let me and others know.

Thank you for your efforts to better all in the industry.

M.W. Mingea
city arborist
Winter Springs, Florida

Editor’s note: We thought the pic used conveyed that it was a removal. It was certainly more obvious in other pictures accompanying the one used. As one of the staff here says, “It was a removal or one horrible pruning job!” Obviously, as a removal, the items you mention are acceptable practices. Thanks for pointing out the need for clarification. We appreciate the feedback. And, please, keep reading!

Send letters and e-mails to editor@tcia.org
**Alturnamats Turn-a-Rack**

Alturnamats Turn-a-Racks, used for storage and transport, are stronger than before. The Turn-a-Rack has been restructured using round steel instead of square. This enables the rack to be lighter in weight yet more durable in strength. The racks are 30 percent lighter, which also saves in freight costs. The racks are less apt to bend with the round steel and also with closed ends instead of the open ended square racks. Turn-a-Racks are part of the MatPak (complete package) or can be purchased separately to go along with the Alturnamats ground protection mats.

Circle 193 on RS Card or call 1-800-733-2622

---

**Morbark Mortbane coating**

Morbark recently converted the exterior paint on its equipment to Mortbane, a two-component urethane industrial topcoat with a two-component urethane primer for a complete chemically-cured coating system. Mortbane, exclusively developed for Morbark, has an excellent gloss finish with superior color retention, more durability, chip resistance and corrosion protection, as well as chemical resistance to antifreeze, diesel fuel and hydraulic fluid. All of these components result in a machine that is more attractive looking and retains its value longer. NCP Coatings, Inc., of Niles, Michigan, Morbark’s exclusive paint supplier, worked with Morbark to formulate a coating to fit Morbark’s customer needs. Mortbane’s formula takes into account the size and drying times of the different pieces of machinery, and includes a resin developed for use by the military for resistance to chemical agents. Throughout development, paint tests included accelerated weathering, gravimeter, corrosion/salt spray, adhesion and hardness tests, among others.

Circle 193 on RS Card or call 1-800-733-2622

---

**Timberwolf TW-C1 small log splitter**

Timberwolf’s new TW-C1 log splitter provides the freedom and quality of its larger splitters in a smaller package that is easy to move around the yard and easy to store. Designed for the homeowner market but also useful for the tree company lot, the TW-C1 can create firewood specifically suited to a particular wood stove, furnace or other use. Like all Timberwolf log splitters, the TW-C1 is welded and assembled by hand with USA made components. All machines are factory tested and built to last a lifetime. It comes standard with an ultra reliable and easy-to-start Honda 160cc engine, log cradles, quality pneumatic tires and a convenient handle that makes moving the C-1 a simple task. The TW-C1 comes with a one year factory warranty.

Circle 191 on RS Card or call 1-800-733-2622

---

**Miller’s T140H stump attachment**

Miller Machine Works’ new T140H Hydro-Mechanical Stump Grinding attachment is designed for the new crop of 140 hp tracked forestry carriers. The T140H’s major structural weldments are based on the company’s PRO150 PTO powered grinders for tractor attachment. The T140H utilizes an enclosed bevel gear final drive, with elevated and remotely positioned hydraulic wheel drive motor. Power is transmitted via a short PTO drive shaft to the sealed oil-bath gearbox. Affixed to the nearly 4-inch diameter gearbox output shaft is New River’s Mfg. Revolution Series cutter wheel assembly. Specific versions with gearbox ratios, cutter wheel drive motor displacements, secondary auxiliary hydraulics, and main frame attach bracketry are available for Gyro Track, Fecon, Rayco, Lamtrac, Super Track, and FAE carriers as well as a fully mechanical drive unit for the Kodiak Cutter Forestry Tractor. The unit also features Miller’s patented telescopic extension.

Circle 191 on RS Card or call 1-800-733-2622

---

**ArborGold version 18**

Tree Management Systems’ new version 18 of its flagship ArborGold software program has new benefits including options to help you work more green and eliminate waste and new job search screens. Features of the v18 include batch e-mailing of invoices and proposals; main screen view options to instantly manage AR, tasks, phone messages, appointments, equipment, inventory and maintenance; patent pending Bucket Marketing System to help automate marketing; defaults to simplify and speed up data entry; powerful search features and print options from the customer screen; user print preferences for proposals, work orders and invoices, and; an all new contract billing feature. Bottom line – the new version 18 is designed to help your business work smarter, more efficiently and reduce costs, and help manage your company from customers to employees.

Circle 192 on RS Card or call 1-800-733-2622

---

For more information on products featured here, contact Sue@tcia.org or 1-800-733-2622.

Send Cutting Edge Product information to: editor@tcia.org
Altec buys aerial device company Morse Mfg.

Altec Northeast, LLC, a wholly-owned subsidiary of Altec, Inc., has finalized the acquisition of certain assets of Morse Manufacturing, a supplier of aerial device equipment for the utility industry located in Sterling, Massachusetts.

“Morse has a well-established reputation for producing reliable, quality products for over 125 years,” said Lee Styslinger, III, president and CEO of Altec, Inc. “They have been a leading supplier of aerial device equipment for the utility industry, and their modern final assembly plant in Massachusetts will be an excellent complement to Altec’s comprehensive network of manufacturing and service facilities located throughout the United States and Canada.”

Altec plans to continue utilizing Morse’s facility in Sterling, Mass., for final assembly of truck mounted aerial lifts, digger derricks, cranes and bodies for customers located in New England and Mid-Atlantic states.

Terex moves to improve delivery time

Terex has partnered with Neal Brothers in Charleston, S.C., to improve customer service and reduce lead times for Terex products sold in North America. Neal Brothers began in February providing logistics support and machine configuration at its facilities in the Port of Charleston, S.C.

“This partnership is the first phase of several projects aimed at improving our operational excellence in North America, by reducing equipment lead times, being more responsive to new equipment order deliveries and, ultimately, helping our distributors reduce their equipment inventory and the inventory in the channel,” says Dean Barley, aftermarket area director, Terex Construction Americas.

Neal Brothers operates two locations in Charleston dedicated to staging and dispatching Terex equipment.

Rayco adds two Ditch Witch dealers to network

Rayco Manufacturing, Inc. has added Ditch Witch of Arkansas and Ditch Witch of Oklahoma to their worldwide dealer network. DWAR has been in business 30 years and has locations in Benton and Springdale. DWOK has been in Oklahoma for 34 years, and they currently have locations in Edmond and Tulsa, Okla.

Each DW operation is equipped with dedicated salesmen, factory certified service technicians and field service trucks.

The added Rayco product line offers chippers, grinders and log splitters.

Send Cutting Edge News items to editor@tcia.org.
Events & Seminars

April 21, 2010*
Arboriculture Safety Standard Committee - Z133 Business Meeting
Embassy Suites Hotel, BWI, Linthicum, MD
Contact: ISA, (217) 355-9411 x259; jhuber@isa-arbor.com

April 23-25, 2010
4th Annual Wildland Fire Litigation Conference
Silver Legacy Resort and Casino, Reno, NV
Contact: www.wildlandfirelitigation.com

April 28-May 1, 2010*
ISA Western Conf. & Trade Show
Doubltree Hotel Reid Park, Tucson, AZ
Contact: (559) 784-8733 www.wcisa.net

May 2-8, 2010
North American Occupational Safety and Health Week (NAOSH) 2010
Contact: www.asse.org/naosh

May 4-5, 2010
ArborMaster Level 1 Tree Climbing Methods & Best Practice
Taylor, MI
Contact: Info@ArborMaster.com; 860.429.5028 x 701
www.ArborMaster.com

May 5, 2010
Occupational Safety and Health Professional Day
Contact: www.asse.org/naosh

May 6-7, 2010
ArborMaster Level 1 Precision Felling, Chain Saw Handling, Safety & Ergonomics
Taylor, MI
Contact: Info@ArborMaster.com; 860.429.5028 x 701
www.ArborMaster.com

May 6-7, 2010
ArborMaster Level 1 Tree Climbing Methods & Best Practice
Haddam, CT
Contact: Info@ArborMaster.com; 860.429.5028 x 701
www.ArborMaster.com

May 6-7, 2010
ArborMaster Level 1 Precision Felling, Chain Saw Handling, Safety & Ergonomics
Indianapolis, IN
Contact: Info@ArborMaster.com; 860.429.5028 x 701
www.ArborMaster.com

May 8-10, 2010
ArborMaster Level 1 Arborist Rigging Applications
Haddam, CT
Contact: Info@ArborMaster.com; 860.429.5028 x 701
www.ArborMaster.com

May 8-10, 2010
ArborMaster Level 2 Tree Climb Methods/Best Practice
Haddam, CT
Contact: Info@ArborMaster.com; 860.429.5028 x 701
www.ArborMaster.com

May 8-10, 2010
ArborMaster Level 1 Arborist Rigging Applications
Indianapolis, IN
Contact: Info@ArborMaster.com; 860.429.5028 x 701
www.ArborMaster.com

May 9-13, 2010*
TCI EXPO 2010 Conference & Trade Show
Pittsburgh, PA
Contact: 1-800-733-2622; cyr@tcia.org; www.tcia.org

January 9-10, 2011
National Green Centre
Formerly WESTERN Annual Meeting and Trade Show
St. Louis, MO
Contact: www.wnla.org; 1-888-233-1876

* Indicates that TCIA staff will be in attendance
60’ & 90’ KNUCKLED TRACKED LIFTS

76’, 88’ & 102’ TELESCOPIC TRACKED LIFTS

70’, 82’ & 95’ TRAILER LIFTS

Simple live hydraulic and electric-over-hydraulic operating system, Hybrid diesel/24V power, Extremely low ground pressure.
GO ANYWHERE, SET UP ANYWHERE.
ALL UNITS TOWABLE BEHIND PICK-UP TRUCKS

Circle 27 on RS Card or visit www.tcia.org
The U.S. Department of Labor’s Occupational Safety and Health Administration (OSHA) is proposing to revise its Occupational Injury and Illness Recording and Reporting (record-keeping) regulation by restoring a column on the OSHA Form 300 to better identify work-related musculoskeletal disorders (MSDs). The rule does not change existing requirements for when and under what circumstances employers must record musculoskeletal disorders on their injury and illness logs.

Tree care employers with 10 or more full-time employees are currently required to keep a record of workplace injuries and illnesses, including work-related MSDs, on the OSHA Form 300 (Log of Work-Related Injuries and Illnesses). The proposed rule would require employers to place a check mark in a column for all MSDs they have recorded.

The proposed requirements are identical to those contained in the OSHA record-keeping regulation that was issued in 2001. Prior to 2001, OSHA’s injury and illness logs contained a column for repetitive trauma disorders that included noise and MSDs. In 2001, OSHA separated noise and MSDs into two separate columns, but the MSD column was deleted in 2003 before the provision became effective. OSHA is now proposing to restore the MSD column to the OSHA Form 300 log.

In the example to the left, what OSHA proposes to add to the 300 Form is represented by the seventh (far right-hand) column.

Quoted in the OSHA press releases, Dr. David Michaels, the new Assistant Secretary of Labor for OSHA, asserts, “Restoring the MSD column will improve the ability of workers and employers to identify and prevent work-related musculoskeletal disorders by providing simple and easily accessible information. It will also improve the accuracy and completeness of national work-related injury and illness data.”

TCIA’s concern is two-fold: For the employer it can be difficult or even impossible to distinguish a musculoskeletal disorder from another type of injury, or a work-related condition from one due to some other cause. We are concerned that the resulting data will be flawed. More important, we are concerned that this seemingly innocuous change in recordkeeping is a precursor to OSHA attempting to mitigate ergonomic injuries through regulation, an effort that it considered and then abandoned nine years ago.

Peter Gerstenberger is senior advisor for safety, compliance & standards for TCIA.
Accident Briefs

Taken from published reports.

Man dies when tree falls on him
A Shelby County, Kentucky, farm worker was killed by a falling tree February 1, 2010. John Sergey, 50, was helping cut down the tree when he was pinned beneath it.

Another man was able to free Sergey and take him close to the roadway to meet the ambulance, but his injuries were just too severe, according to The Sentinel-News. Sergey had massive chest trauma.

Submitted by Dave Leonard of Lexington, Kentucky.

Chipper blamed in man’s death
A coroner says a worker for a southern Illinois tree service died in Marion, Illinois, when a piece of the chipper he was using flew off and hit him. Mark Davis, 46, of West Frankfort died February 11, 2010, at a hospital shortly after the accident.

Davis was working for D.S. Tree Service at a Marion home when the accident happened, according to the Chicago Tribune.

Trimmer dies in palm
A man died February 13, 2010, while trimming a palm in a Pasadena California. Artemio Hernandez, 40, of Sun Valley, California, a private contractor, was suspended 50 feet in a palm tree when he was pinned by a ring of fronds, according to the San Gabriel Valley Tribune.

Gardener Jose Martinez says the trimmer shouted as he was struck by the fronds but then went silent. Firefighters determined the man was dead and covered him with a sheet as they worked to cut him free from a chain that tethered him to the tree. It took firefighters using a ladder truck about two hours to lower him to the ground.

Man falls 40 feet from tree
A 28-year-old man fell 40 feet from a tree at a residence in the Kenmure section of Flat Rock, North Carolina, on February 16, 2010. The man did sustain injuries, but not any obvious broken limbs, according to The Times-News of Hendersonville, N.C.

Brush cutter killed when machinery falls through ice
A worker clearing power lines in Anchorage, Alaska, died February 17, 2010, when his tree and brush cutting machine fell through the ice. It happened around 4:30 in the afternoon about a mile into the woods off of the Parks Highway.

Jack Forshee, 23, of Anchorage was killed when his Hydro-Ax machine broke through the ice of a pond and sank in about 15 feet of water, according to a KTUU-TV Channel 2 report. Ice had apparently blocked the doors and prevented the operator from getting out. Divers recovered Forshee’s body at around 6:30 that night.

A second Hydro-Ax also broke through the ice into shallow water, but the operator of that machine managed to escape.

Man dies in tree-cutting accident
A 66-year-old Hunter, New York, man died February 22, 2010, after being struck in the chest by a tree he had cut down on his property. Ivan Bolcek was discovered by his wife after he had been outside cutting down a tree on their property. The cut end of the tree had apparently kicked back toward Bolcek as it fell, inflicting crushing injuries. He suffered massive trauma to the chest, and was taken to Columbia Memorial Hospital where he later died, according to The Daily Mail.

Man dies after being hit by tree
Jason Williams, 39, of Vancouver, Washington, died March 8, 2010, the result of injuries suffered when he fell from and/or was hit by a tree he was taking down on February 24, 2010, in Vancouver. Williams had been in critical condition after suffering head trauma and facial lacerations after the top of the tree he was (Continued on page 41)
By Darcy Maulsby

From tumor-like growths on bark to tattered leaves, tree health issues can take a variety of forms, although pinpointing the exact cause can be tricky. On the flip side, what appears to be a serious problem may be a minor issue that won’t cause any long-term damage. How can an arborist make the right call?

“Many factors can cause trees to become unhealthy and lose their aesthetic value or die, including infectious diseases, insect infestations, environmental stresses or site problems,” says Mark Vitosh, a district forester for the Iowa Department of Natural Resource’s Forestry Bureau, who addressed this topic during the 2010 Shade Tree Short Course at Iowa State University in early March. “In many cases, more than one factor may be involved. A correct diagnosis of the problem is the important first step in trying to save an unhealthy tree.”

It pays to examine an unhealthy tree systematically, collect important background information, and find expert assistance, if necessary. Vitosh and other instructors at the Shade Tree Short Course offer the following tips:

Determine the specific type of tree involved. Each species has its own characteristic insect or disease problems. If possible, find out the specific variety or cultivar of the tree (e.g., common name: green ash, scientific name: Fraxinus pennsylvanica, cultivar ‘Patmore’). This will help in determining if the tree is adaptable to the region and the site conditions. Trees planted out of their hardiness range and optimum growing conditions often show poor growth and vigor. Stressed trees are less able to resist insect and disease attack.

Note the soil type (clay, sand, etc.) where the tree is planted. Certain tree species perform best on particular soils.

If insect damage is present, pay attention to the details. Determine if the damage is from chewing or sucking insects. Japanese beetles, for example, love linden trees and can cause a lot of defoliation. Also, try to determine the life stage of the insects that caused the damage. In addition, look for feeding insects on trees before applying any treatments. Be aware that not all damage may require a treatment, says Dr. Laura Jesse, an entomologist at Iowa State University.

“Leaf feeding, for example, may look bad, but it may not always be a big problem for the tree. Insects like borers that move into the trunk or branches of a tree pose a much more serious threat,” Jesse explains.

Note the kind of care the tree is receiving. Has the tree been watered or fertilized? How often and how much? Have herbicides, insecticides or fungicides been used on or near the tree? Has the tree been topped or pruned heavily in the last few years?

Look for evidence of injury to other surrounding plants. The presence of injury symptoms on different species suggests a general environmental or chemical factor is responsible for damage or decline.

Determine when the symptoms first appeared. Some insect and disease problems show up at certain times of the year, or during certain weather-related events. How quickly did the problem develop? Has the trouble occurred in previous years?

Note which portion of the tree is showing the problem. Is the issue evident over the entire tree, on the main tree, or only in the upper branches? Consider root problems as a possible source of above-ground symptoms. Yellow leaves, for instance, might be caused by root injury or high soil.
Carry a digital camera. Vitosh, who has 22 years of tree care experience, can often diagnose tree health issues via e-mail when arborists send him a good, clear photo of a plant health problem they’ve encountered. “When I reply, I can also e-mail links to useful online resources,” Vitosh says. (Tchukki Andersen, TCIA staff arborist, may be able to help in this manner as well.)

Call the experts. Utilize your land-grant university’s plant diagnostic laboratory, and provide as much information as possible when inquiring about plant health problems. Supply samples, if possible, says Jesse, who notes that leaves can be pressed, and insects can be preserved in hand sanitizer, due to its high alcohol content. Also, note key information such as the age of the tree, a detailed description of the problem and the time of the year when the problem appeared.

“We like to hear from people in the field and find out what they are seeing,” adds Jesse, noting that some arborists call her every few weeks to ask which tree health problems have been emerging in the state.

Keep learning. Attend educational seminars for arborists, rely on tree care reference books, and stay current on emerging tree health issues. Within the past decade, for example, an unusual decline of black walnut trees (Juglans nigra) has been observed in several western states, Vitosh says. Tree mortality is the result of an attack by the walnut twig beetle (Pityophthorus juglandis) and subsequent canker development around beetle galleries caused by a fungal associate (Geosmithia sp.). A second fungus (Fusarium solani) is also associated with canker formation on the trunk and scaffold branches. Known as thousand cankers disease, this insect-disease complex often kills trees within three years of the initial symptoms being found. Rapid detection and removal of infected trees currently remains the primary means of managing this disease.

“With tree health problems, you don’t always have to know all the answers, but you do have to know where to find the answers for your clients,” Vitosh says. “Then get back to them in a timely manner.”

---

**Checklists Help Diagnose Health Problems**

This three-step process from Iowa State University Extension helps analyze tree health symptoms that can be caused by a number of factors, including weather damage, infectious disease, insect feeding, chemical injury, site-related stresses and transplant shock.

**Step 1. Examine the foliage (leaves or needles).**
- ▶ Do the leaves have holes or ragged edges?
- ▶ Are the leaf margins brown?
- ▶ Are leaves abnormally discolored (yellow, light green, brown, black)?
- ▶ Are spots or bumps evident on the foliage?
- ▶ Have some or all of the leaves fallen prematurely?
- ▶ Are the leaves deformed (cupped, twisted, etc.)?
- ▶ Are insects or mites present on the leaves?

**Step 2. Examine the trunk and branches.**
- ▶ Has the bark been injured by mowing equipment, vehicles, animals or girdling wires?
- ▶ Is there evidence of insect activity (holes, chewing marks, tunnels, etc.)?
- ▶ Are there any splits or cracks in the bark, and if so, on what side of the tree? Sunscald injury, frost and lightning are all factors that can cause the bark to split or break apart.
- ▶ Has the tree been damaged by ice, hail or wind?
- ▶ Is the tree in an exposed, windy location?
- ▶ Are any wet, sticky substances oozing from the bark? This may indicate an infection of the wood by bacteria.
- ▶ Is there evidence of decay or hollowing of the trunk?

**Step 3. Consider the roots.**
- ▶ Has there been an addition of a patio, road, sidewalk or new building nearby?
- ▶ Have any flowers, shrubs or trees been planted nearby or under the tree?
- ▶ Is plastic or other impermeable fabric used around the tree?
- ▶ Has the soil been excessively wet or dry?
- ▶ Has there been a change in the level of the water table?
- ▶ Is the site poorly drained? Does water stand after rains?
- ▶ Have any chemicals been applied to the soil?
- ▶ Are de-icing salts used on roads and walks nearby?
- ▶ Is there visual evidence of girdling roots?
- ▶ Is healthy turf growing over the tree roots?
Crane safety topics for discussion should include basic inspection, basic machine set up, industry resources available, and a little bit about crane maintenance and basic emergency procedures. But for this article, we will focus on what is going to govern you out there, load chart basics and some of the physics of lifting. A lot of arborists do not understand what “moment” is, so we will explain it. We will also discuss some specialized crane equipment being designed for the tree care industry.

Crane resources

There are a few publications that provide guidance to crane users, either by federal mandate or through industry approved practices. OSHA 29 CFR 1910.180 is the crane standard for general industry. OSHA 29 CFR 1926.550 pertains to construction; I think this one reads a little easier, even though it isn’t directly applicable. Crane standard practices are contained in ASME B30.5 for mobile and locomotive cranes.

Load charts

Those who have actively worked with cranes are familiar with some of the load charts, but may not know and understand some of the little differences that appear from one crane manufacturer to another. The charts I will discuss come out of the Altec community, as you might expect. They include range diagram, capacity charts, area operation, standard deduction weights and zero boom-angle chart, stow jib chart and jib capacity chart.

The range diagram houses four different types of information, which is pretty standard by most manufacturer load charts. You have radius information and boom-length information, angle information and height-above-ground information. Height-above-ground information is useful when you have overhead limitations or if you have to place something on top of a building. Or, in the case of our industry, maybe you have to take a tree down that is over the top of a building. You have to make sure your clearances are adequate, and to do so you would use that portion of the range diagram. (Figure 1)

On Altec’s capacity chart, the load radius is listed on the left column and then the boom sections are broken out: 31, 51, 70, 108 and 127 are the standard boom sections with our particular boom. Underneath the boom sections you will notice that there is the capacity number, but there is also an angle indicator. If we go back to the range diagram, I said that angle was shown in the range diagram, but the angle shown in the range diagram and the angle shown in the capacity chart are slightly different. The angle shown in the range diagram is an unloaded boom with no deflection. When we get into the capacity chart, it is a fully loaded boom with full boom deflection.

With the Altec crane,
there is not a lot of deflection and on a lot of the “beefy” cranes of yesterday there was not a lot of deflection. In some of today’s 150- or 200-ton cranes that have five to seven sections of boom, there can be 10 to 15 degrees of deflection – they can look like fishing poles. You have to account for deflection when lifting because with a deflected boom, the load radius may increase significantly.

On Altec’s load capacity chart (Figure 2), please note the line that separates structural integrity on the load chart from stability. Different companies display this differently; for instance, Link-Belt has shaded areas where Altec uses this dark line concept, and Manitowoc uses an asterisk. Regardless of how it is depicted, anything above the line or barrier is structural, which means that if you exceed the numbers in the chart, you are going to tip the crane or something is going to break. It is the structural integrity of the unit versus the stability. If you exceed stability capacities in the chart, you will tend to tip the crane (after it tips, then it breaks).

There was a concept in the old days of cranes – 20 years ago or so – which was that if you couldn’t make the lift then you simply strapped on more counter weight. Back then this worked because cranes tended to be over-built. However, with the refinements in engineering and metallurgy, if you were to do something like that today, all you would be doing is changing the “break vs. tip” line and not improving the capacity. Today’s tolerances are much tighter from every crane manufacturer company because it is a very competitive selling market.

The section of the chart for the area of operation defines the quadrants of operation and any special conditions that you have to apply in those quadrants. I was reading a Manitex load chart recently. They defined the “A” zone as over the back end of the crane, and the “B” zone was everywhere else. They provided extra picking capacity backing the A zone, taking advantage of the extra counterweight. This is perfectly legitimate, only making it a little more complex to understand. Altec doesn’t do that. We may be shorting ourselves a little over the back end, but this is just the way that we present it.

We provide deductions for handling devices that we supply (see Figure 3). You are free to use other manufacturers’ handling devices (i.e. balls and blocks) so long as you calculate the deductions accurately, and limit your lifts to this new capacity.

People confuse how to use “zero degree boom capacity.” I was taught, and consequently I teach, that the purpose of this portion of the chart is to give your capacity when your boom is stuck straight out. You might encounter this at the shop or when you are first coming off of your rest. The idea behind this is to know how much rigging and balls and blocks you can put on the end of the boom safely without tipping or breaking anything. It gives a lifting capacity at zero degrees, but from an operational standpoint I would not recommend it.

Another variable from company to company relates to stowed jib deductions. If I were to take a jib and place it on a scale, it might weigh in at 1,200 pounds, which leads to the question, “Why have a stowed jib deduction that varies?” The jib always weighs what it weighs. The reason is its position over the tipping point at various angles changes and consequently the effect

![Boom angle markings are easily seen on the crane belonging to Burke’s Tree Service of Rochester, N.H.](image-url)
on the crane changes. The manufacturers have squeezed as much lifting capacity out of the crane as possible. The bottom line is to know the jib’s actual weight versus its effective weight.

The moment
Talking about “moment” is always near and dear to my heart. This is probably the most commonly misunderstood concept in dealing with anything that has to do with cranes. I have talked to countless crane operators who think “moment” has to do with time, and it doesn’t. A load moment indicator tries to measure the affect of the weight on the crane. Let’s take a look at how you calculate it.

Moment is very simply the weight multiplied by the distance. It can be measured in SAE or metric units (pounds/tons and inches/feet or kilograms/metric tons and centimeters/meters).

Moments of a load are measured using the load moment indicator. The load moment indicator uses a scale, usually a lever bar with a weight on one end and a measurement on the other. The weight is multiplied by the distance from the scale to the load to determine the moment of the load.

Let’s try to apply this. Take a fulcrum point, which is the balance point, and a distance measurement of five feet, and add 200 pounds of force and this is a balanced condition: 200 pounds x 5 feet = 1,000-foot-pounds of torque. That is how it is measured.

Let’s take it another step. If I increase the weight to 400 pounds, I need to decrease the distance to 2.5 feet to maintain a balanced condition: 400 pounds x 2.5 feet = 1,000-foot-pounds, just as 200 pounds x 5 feet = 1,000-foot-pounds.

Let’s apply this principle to our crane. You never want to reach balance in a crane. You want it imbalanced, heavier on the counterweight side, otherwise you are going to have a problem. The engineers factor in all of this information and give you the load chart. When they give you that hard number, there is no fudge factor. That is the limit. The fudge factor comes when you push the limit to a close-to-balance position and then you have a 7 pound pelican that lands on the end of the unit, or a miscalculation of some sort and — catastrophe.

Capacity restrictions
Load charts are designed at 85 percent of tipping, and that is according to the source ASME B30.5. For wheel-mounted cranes using fully extended outriggers set with tires off the supporting surface, the maximum load rating is 85 percent. If the tires are on the ground with an “on rubber” chart it is 75 percent. You will never use those numbers because it is already factored into your chart, but this is where the numbers come from.

Determining load weight is key for tree work. There are four theoretic ways to cal-
Calculate load weight. You can measure the weight on a scale, which isn’t possible in tree care. You can engineer the specifications and have a specification plate. Unless the good Lord is going to give you information, I don’t think that is possible either. There is the trustworthy load manifest, but the last one is best for tree work. Calculating and “engineering” the load mass is a legitimate method of determining load weight, but you want to build in a safety factor. There is no official safety factor; however, I recommend at least a 20 percent safety factor. You still need to run the calculations and it is ideal to have supporting information, but it isn’t always possible.

Deductions have to include the weight of all accessories not accounted for by chart values, including the weight of the ball or the block. A common question is, “why not factor that into the load chart?” The answer is because they change depending on how you equip your unit. Similarly, the stowed jib has to be factored in.

Extra rope is a factor that you may not be aware of. In smaller cranes, this isn’t a big factor, but in larger cranes it can be. Let’s say you needed one part of line to lift the tree, but you have a block with four parts of line. That gives you three extra parts of line that you have to include in your calculations. These things become very significant when you are doing critical lifts. If you are not doing “picks” in the top 20 percent of your chart, then it is not as important. If you are using boom trucks where you have 7⁄8-inch rope, it may be a half a pound per foot, which is not a lot of weight. But if you have 1-inch or larger wire rope, you can add up to two pounds per foot.

Slings and rigging are deduction weights to be factored in. If you are working in tree, then your slings have to be factored in.

The real challenge in tree care is that there is no setting things down and starting over. When you make that final cut you are committed, which is why you need to take a look at this from a more scientific perspective.

**Helpful LMI equipment**

Here are some strengths and weaknesses, in general, for load moment indicators. The LMI takes measurements as you are loading while you are loading it and you can see the load as you go through the paces and change boom angles and telescopic sections. It will give you dynamic measuring. It also gives you lockouts when you approach the edge of lifting envelope, which is a great benefit and it keeps you out of trouble. If you inadvertently stray into the far region of your lifting envelope and you lose sight of that because you are watching the load, the LMI locks you out. Calculating radius and working heights based on the data that it gives you is a good thing. The LMI gives you operational data as you work with the systems, and they are generally very accurate as long as they are calibrated correctly.

Calibration in one potential weakness. You have to understand what things are doing first in order to calibrate the system. The next potential weakness is operator LMI programming. The LMI is only as...
good as the programming provided by the operator. Knowing you have a better chart with 100 percent outriggers, you naturally program your LMI with 100 percent outriggers. When you set up with 50 percent outriggers, you effectively just lied to the computer and the computer cannot help you. Whether this is done inadvertently or deliberately it puts you in a bad way because the computer can’t help you at this point and programming becomes an issue.

I am not real fond of using the LMI system to reliably weigh things because of the way it captures data.

The anti-two-block switch and keeps your ball or block from contacting the top part of the boom head. It is supposed to shut things down before that happens. That signal travels through a cable (typically, there are wireless systems) and eventually ends up in the computer system to tell the computer system to shut the unit down. It is done electronically and it is a simple switch.

Next there is a boom length potentiometer. The reel on the side of the boom is attached to a potentiometer. For those of you who do not know what a potentiometer is, if you have a dimmer switch in your dining room then you know if you slide the switch it changes the intensity of the lights. That is a potentiometer and all you are doing is changing voltages by sliding that potentiometer up and down. The potentiometer in a crane does it through a rotation and as you rotate that reel sending the boom out, it changes the resistance, which then can be measured and interpreted by the computer. This assumes it is calibrated correctly. You have to make sure it is calibrated and you have to check your calibration from time to time.

The boom angle potentiometer works on the same principle. The boom angle underneath the cap, or hat, is usually some sort of mechanical pendulum attached to a potentiometer that hangs vertically. As your boom goes up and down it changes relationship to the boom and acts as a dimmer switch. An electrical signal goes through there and changes voltage, which is interpreted by the computer and gives you an angle indication. It can be very accurate if they are calibrated correctly. If you don’t calibrate them, then you have problems.

Here is why I don’t like the LMI as a weighing device. The units typically have pressure transducers that are attached to the rod side and piston side of the cylinder and they act pretty much like a potentiometer. They don’t really do the same thing but they act as a strain gauge and they change resistance because of pressure. They are measuring pressure and converting it to a

Circle 2 on RS Card or visit www.tcia.org

Circle 13 on RS Card or visit www.tcia.org
resistance and the computer shoots an electrical signal through the transducer and it changes the voltage based on the pressure that is being indicated by that cylinder. Adjustments of 5 to 20 pounds based on what you see on the display can’t be guaranteed to be very accurate. Where they need to be accurate is when the shut-off occurs. These are not weighing devices. The shut-off occurs at a particular pressure and that can be calculated very accurately, so the accuracy improves as you get closer and closer to the shut-off.

**Summary**

My take-home message is, know your charts. I encourage you to read the notes of your charts because there is a lot of important data there that you may have overlooked. Operate safely.

Joseph W. Birkbeck III is a master instructor with Altec Industries, Inc. in Birmingham, Alabama, and a member of the Altec Sentry Safety Department. This article was excerpted from his presentation on the same subject at TCI EXPO 2009 in Baltimore.
HELP WANTED

Carolina Tree Care
Currently offering tree care positions in North & South Carolina. Seeking experienced foreman, tree climbers, PHC specialist, Cert. Arborist & Sales Representatives. We offer a safe, drug-free culture, competitive benefits and paid training. Come join one of the fastest growing tree care companies in the Southeastern U.S. CDL & ISA certifications are a plus. Fax resume to (704) 792-2273 or e-mail to kgentle@carolinatree.com (704) 788-8733.

Experienced Tree Care Foreman Burlington, WI
Arbor Images, Inc., a TCIA accredited company, currently seeking highly skilled crew foreman and climber with minimum of 5 yrs.’ production experience. ISA certified arborist or desire to obtain. Must possess excellent communication and leadership qualities. CDL required. We offer competitive wages and benefits. Fax (262) 763-5090 E-mail: arborimagesinc@sbcglobal.net.

PHC Supervisor - Colorado
Established tree service company is looking for a motivated individual with talent and expertise to take our PHC program to a higher level of production and service. Must have a Colorado Qualified Supervisors license in category 207-ornamental; CDL w/good MVR; leadership skills; product knowledge; plant identification skills & communication skills. E-mail resume with cover letter to Shannon@rosstree.net.

Bartlett Tree Experts
Continues to grow in the South with immediate openings for experienced Sales Arborist/ Representatives, experienced Foremen, IPM Technicians and Tree Climbers in the Carolinas, Georgia, East Tenn & No. Fla. Benefits include paid vacation, holidays, medical, dental, 401(k), training & continuing education. Applicant must be reliable, customer-service & career oriented. CDL a plus. Fax or e-mail your resume to (770) 414-9762; sjohnston@bartlett.com; www.bartlett.com.

Sales (Arborist)/Climber/Foreman/PHC Tech/Manager
Are you looking for a stable company in an unstable environment? Join us in the D.C. Metro Area. We specialize in high-end residential work and Federal Government properties. We seek only a few professionals dedicated to best practices and growth. RTEC Treecare is an Accredited company, recognized as a 2009 Department of Homeland Security Small Business of the Year. Specializing in general tree work, plant health care and our newest division, Environmental Solutions. We offer a safe, drug-free environment, competitive benefits package, relocation and temporary housing placement, and promote career advancement and continuing education. E-mail: Jobs@RTECtreecare.com; (703) 573-3029.

Tree Climber/Utility Arborist
Expanding tree care company in central NJ. Minimum 3 yrs’ climbing experience, utility line clearance experience a plus. Must have valid DL. Top pay & benefits. Contact Darrell (732) 921-3432 or dfalkin88@comcast.net

New Larger
11 ft. Dump Body from Southco Industries
Now
11 ft 6in. long x 66 in. high (14.5 cu. yd. capacity)

Chassis Cabs Available to complete the package

Circle 23 on RS Card or visit www.tcia.org
Exciting Career Opportunities for Service Industry Managers

Come join one of the largest Vegetation Management Companies in the North America. DeAngelo Brothers Inc. is experiencing tremendous growth throughout the United States and Canada, creating openings company wide. We are seeking field supervisors and middle managers responsible for managing the day-to-day operations of vegetation management operations. Experience in vegetation management preferred. Qualified applicants must have proven leadership abilities, strong customer relations and interpersonal skills. We offer excellent salary, incentive programs, bonus and benefits packages, including 401(k) and company paid medical coverage.

For career opportunity and confidential consideration, send or fax resume, including geographic preferences and willingness to relocate to: DeAngelo Brothers Inc., Attn: Carl Faust, 100 North Conahan Dr., Hazleton, PA 18201. Phone: 800-360-9333. Fax: (570) 459-5363. cfaust@dbiservices.com EOE/AAP M-F-D-DV

Seeking Operations Mgr.

Paul Bunyan’s Tree Svc., Roanoke, VA. Degree in Forestry or related field, or comp. experience & training/education. Resp. include Sales and Application. Fax resume & salary req. to (540) 345-3160 or e-mail Tim@Pbunyan.com.

Production Managers/Climbers/Salespeople

Min. 5 yrs. exp. Climbers must prune w/o spikes. Year-round, salary, pd vacation/health, help moving. Virginia, near Williamsburg, Busch Gardens, VA Beach. hendrontreecareinc@verizon.net, (757) 595-8733.

Take Your Career a Mile High

With roots proudly planted in Colorado’s soil since 1947, we’ve grown into one of America’s most respected landscape care services. Come join more than 200 passionate green-industry professionals, with opportunities for:

Certified Arborists with removal experience
Trim Field Supervisor with Ornamental Pruning Expertise
Sales Representatives
PHC Qualified Supervisors
Other production positions available – in Denver and Fort Collins. Swingle offers year-round employment in the sunny Colorado outdoors, plus top industry wages and benefits. We also provide great opportunities for college graduates and student interns. If you are a results-oriented, motivated individual looking for a growing company recognized for safety and legendary service – we need to talk to you. Visit our Web site at www.myswingle.com to learn more or to apply online. Or call Dave Vine at (303) 337-6200 or e-mail dvine@swingletree.com. When it comes to your career…choose Swingle.

Bartlett Tree Experts

Continues to grow in the Western U.S. & Canada. Immediate openings for Experienced Foremen, Tree Climbers, IPM Monitors & Arborist Reps in San Francisco Bay area, Phoenix, Tucson and British Columbia, Canada, offices. Paid vacation, holidays, medical, dental, 401(k), training and continuing education. Applicant must be safe, reliable, customer-service & career oriented. CDL & ISA certifications are a plus. Fax or e-mail your resume to (415) 472-8651 or pandreucci@bartlett.com.

Climber/Bucket Operator w/CDL

Total Tree Care, Inc. has a tree climber position available. Candidate must have minimum of 2 years’ experience with valid CDL. Ability to climb any size trees, operate aerial lifts and apply standard tree and shrub pruning techniques with minimal or no supervision required. Must be a team player and communicate effectively at all times. Benefits and 401(k) plan. Send resume to hr@totaltreecare.com or fax (203) 272-0393. EOE/AAE

Work in Baton Rouge, LA

Hiring crane operator and/or diesel mechanic w/CDL; driver w/1 ton p/u & dump trailer; and experienced, drug-free tree climbers. Preferably Christian values. Call Tree Surgery by Ricky Vincent (225) 683-3800.

ALMSTEAD TREE & SHRUB CARE CO.

You Can Still Stimulate Your Career in Today’s Economy

Join a company that creates opportunities out of challenges! Despite economic hardships nationwide, Almstead has recently experienced rapid growth. As a team, we’re dedicated to our clients, their properties, and the communities we service across New York, New Jersey and Connecticut.

We’re seeking branch managers and certified arborists. If you want to make a difference in your community and use your professional skills in new and exciting ways everyday, then we want to hear from you!

In return, we offer:
- Potential for six-figure income
- Comprehensive benefits package
- Employee recognition awards
- A company that supports & appreciates you

Call 800-427-1900, fax 914-576-1537, or e-mail your resume to jobs@almstead.com

Circle 1 on RS Card or visit www.tcia.org

Take Your Career a Mile High

With roots proudly planted in Colorado’s soil since 1947, we’ve grown into one of America’s most respected landscape care services. Come join more than 200 passionate green-industry professionals, with opportunities for:

Certified Arborists with removal experience
Trim Field Supervisor with Ornamental Pruning Expertise
Sales Representatives
PHC Qualified Supervisors
Other production positions available – in Denver and Fort Collins. Swingle offers year-round employment in the sunny Colorado outdoors, plus top industry wages and benefits. We also provide great opportunities for college graduates and student interns. If you are a results-oriented, motivated individual looking for a growing company recognized for safety and legendary service – we need to talk to you. Visit our Web site at www.myswingle.com to learn more or to apply online. Or call Dave Vine at (303) 337-6200 or e-mail dvine@swingletree.com. When it comes to your career…choose Swingle.

Bartlett Tree Experts

Continues to grow in the Western U.S. & Canada. Immediate openings for Experienced Foremen, Tree Climbers, IPM Monitors & Arborist Reps in San Francisco Bay area, Phoenix, Tucson and British Columbia, Canada, offices. Paid vacation, holidays, medical, dental, 401(k), training and continuing education. Applicant must be safe, reliable, customer-service & career oriented. CDL & ISA certifications are a plus. Fax or e-mail your resume to (415) 472-8651 or pandreucci@bartlett.com.

Climber/Bucket Operator w/CDL

Total Tree Care, Inc. has a tree climber position available. Candidate must have minimum of 2 years’ experience with valid CDL. Ability to climb any size trees, operate aerial lifts and apply standard tree and shrub pruning techniques with minimal or no supervision required. Must be a team player and communicate effectively at all times. Benefits and 401(k) plan. Send resume to hr@totaltreecare.com or fax (203) 272-0393. EOE/AAE

Work in Baton Rouge, LA

Hiring crane operator and/or diesel mechanic w/CDL; driver w/1 ton p/u & dump trailer; and experienced, drug-free tree climbers. Preferably Christian values. Call Tree Surgery by Ricky Vincent (225) 683-3800.
Cert. Arborist Foremen, Aspen CO

Have a passion for high quality tree care & have experience? We need you! Exc pay, late model equip. Work 8 months & play for 4 in the most beautiful areas. E-mail jjones@aspentreeservicecolorado.com, fax (970) 963-6214.

Florasearch Inc.


DeAngelo Brothers, Inc. has been a leading Vegetation Management Company since 1978. We specialize in Railroad, Roadside, Industry and Aquatic Vegetation Management, and some of our client’s include many of the largest corporation's in North America. We are a market leader with a clear vision of the future investing heavily in our people, core values and friendly work environment. We are looking for hard-working, talented people who have experience in managing day-to-day operations for our Branches and Divisions throughout the United States and Canada. Qualified applicants must have a minimum of 2 years’ experience working in the green industry, have proven leadership abilities and strong customer relations and interpersonal skills. We offer an excellent salary, bonus and benefits package including 401(k) and company paid medical and vacation benefits. For career opportunity and confidential consideration, send or fax resume, including geographic preference and willingness to relocate, to: DeAngelo Brothers, Inc.; Attn: Human Resources Department; 100 North Conahan Drive; Hazleton, PA 18201; Phone: 1-800-360-9333; Fax: (570) 459-5363; E-mail: cfaust@dbiservices.com EOE/AAP M-F-D-DV.

Arborist Representative


Mead Tree & Turf Care, TCIA Accredited, has been providing professional, safe, quality tree care for MD, DC & No. VA for 30 yrs. Competitive wages & benefits. E-mail Rgodwin@meadtree.com or call (301)-854-5990.
Camelot Tree & Shrub, Grosse Pointe MI

Currently hiring for the following positions: Pruning & Removal Dept. Manager/Sales (min 5-yrs’ exp), ISA Certified preferred. Plant Health Care Technician (min 2-yrs’ exp), & Pesticide license w/category 3b. ISA Certified preferred. We offer a safe and fun working environment, base pay + incentives, paid vacation, holidays, medical, 401(k), training and continuing education. If interested please e-mail us at Camelot@camelottree.com.

Crew Chief Wanted

Experienced Crew Chief/Climber, knowledgeable in all aspects of ANSI pruning, removals & safety standards. CDL required, Arborist certification a plus. Competitive wage & benefit package. Resume to (518) 237-8370 JDavey@ParadiseTree.com.

Plant Health Care Manager, Indianapolis

Tree Service looking for a Certified Arborist, 3 yrs’ experience w/mid-west plants and diagnostic skills a must. Great pay & benefits. phil@pingstreeservice.com or (317) 298-8482. Visit www.pingstreeservice.com.

EQUIPMENT
FOR SALE

Selling Retired Equipment

Hi-Ranger & Aerial Lift of CT lifts on Int’l and Ford Chassis. All are diesel, forestry & rear-mount pkgs available. Diesel self-feeding chippers available. Contact Paul (585) 295-2412.

Spider Lifts for Sale

New, demo and used. Different brands from 52-foot to 102-foot working height. See them at www.TrackedLifts.com or call Mike Hrycak at (201) 206-2464.

Owner Retired – Equipment Sale

1993 Chevy C60 V8 5spd chipper truck 68k mi. $15,900. Alltec whisper chipper 16” drum style 6 cyl 370 hrs $11,500. Rayco Super Jr stump machine 1625 & trailer $5,000. Call (920) 235-5165.

DuMorr Lift Rentals

We pride ourselves on supplying the best & newest equipment on the market. Up to 75’ of working height for rent or sale. Call for rates & availability. Servicing New England & NY. 1-800-258-1010 or dumorrliftrental@gmail.com.

Tamarack Forestry is selling bucket truck surplus

Aerial Lift of CT Buckets mounted on 1996-1999 Ford, GMC & Int’l trucks. All trucks are diesel, average miles are 50,000 & booms are in excellent shape. Prices are $12,000 to $15,000. Call Matt at (315) 323-2303 or 1-800-858-0437.

Circle 9 on RS Card or visit www.tcia.org

TCI classified ads work!
Call 1-800-733-2622
E-mail
sue@tcia.org

DuMorr Lift Rentals

Great Career Opportunities
COAST TO COAST & CANADA.

• Arbor Care
• Utility Line Clearing
• Landscape Management
• Environmental Consulting

POSITIONS AVAILABLE IN MOST AREAS.
CALL 1-800-445-TREE

Contact recruiting@davey.com
or visit www.davey.com

The Davey Tree Expert Company,
1500 North Mantua Street, Kent, OH 44240
An Equal Opportunity Employer

TAMARACK FORESTRY

AERIAL LIFT OF CT BUCKETS

AERIAL LIFT OF CT BUCKETS

BARTLETT TREE EXPERTS

BECAUSE UPWARD MOBILITY IS PART OF OUR NATURE.
For over 100 years, we’ve made trees, shrubs–and our people thrive. Ours is an entrepreneurial culture in which new ideas are welcomed and decisions are shared—not handed down. We provide a highly-competitive compensation package and generous benefits, including medical/dental/life insurance, 401(k) and more. And we encourage our employees to succeed both in and out of the workplace. Consider a career with Bartlett Tree Experts. Where growth happens everywhere you look.

PLEASE CALL MANAGER OF EMPLOYMENT & BENEFITS, 203.323.1131 OR VISIT BARTLETT.COM

AlturnaMATS, Inc.

Single Source for Ground Protection Mats available 2’x4’ up to 4’x8’. Guaranteed 6 years!! Built Tough Guaranteed! 1-888-544-6287, sales@alturnamats.com; www.alturnamats.com.

Ropes, Ropes, Ropes

All types and brands of professional arborist climbing, lowering and rope accessories at warehouse prices. Call for current price list. Visa, MC, AX. Small Ad – Big Savings, since 1958. 1-800-873-3203.
Opdyke Inc.
Reputable tree service in So. Wisc. for sale. 20 year old company with loyal repeat customers. Full line of equipment. Call (608) 439-1900.

Allied Equipment of Wisconsin
Successful tree service in Loudoun County, VA for Sale
Steady, loyal customers, trucks and equipment included. Expansion potential with location near DC, MD and West VA. Call (540) 338-9570.

Havre, MT
Invaluable growth for an enterprising skilled arborist. Hi-line area needs the skills of a real arborist. Hunt, fish, camp in the Big Sky state. A very small investment required to assume this opportunity. (406) 265-3390 or astandstall@gmail.com.

PRODUCTS & SERVICES
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, PO Box 548, Westport, CT 06881-0548. Phone: (203) 226-4335; Web site: www.arborcomputer.com; e-mail: phannan@arborcomputer.com.

ArborGold Software
Complete job management! Tree Management Systems, Inc. delivers cutting edge software specifically designed to help tree care companies close more sales, create repeat business, reduce cost and monitor crew productivity, works with QuickBooks. Visit our Web site www.ArborGold.com for a FREE in-depth video demo or call 1-800-933-1955 today for more information.

BUSINESSES FOR SALE
New Hampshire - Double-Digit Growth 3 of last 4 yrs
Focus on tree health care w/annual maintenance contracts in region’s most affluent area. Late model vehicles (06/07) w/lots of new equipment. E-mail robchat@countrybusiness.net or (207) 773-1745.
See You in

CHICAGO

The 86th Annual ISA Conference & Trade Show

BUILDING THE ROOTS
OF ARBORICULTURE

Grow your arboricultural knowledge in one of the “greenest” cities in the United States

SCHEDULE OF ACTIVITIES

Friday, July 23
- Up By Roots Workshop with Jim Urban

Saturday, July 24
- International Tree Climbing Championship (Masters’ Qualifying Events)
- Tree Academy Workshops
- Arbor Fair & Fun Climb
- Tour des Trees Arrival

Sunday, July 25
- Tree Academy Workshops
- ITCC Head-to-Head Footlock
- ITCC Masters’ Challenge
- Opening Ceremony
- Welcome Reception on the Trade Show Floor

Monday, July 26
- Educational Sessions
- Trade Show & Climbers’ Corner Demo Tree
- TREE Fund Auction and Reception

Tuesday, July 27
- Educational Sessions
- Trade Show & Climbers’ Corner Demo Tree

Wednesday, July 28
- Educational Sessions
- Professional Affiliates Day

Thursday, July 29
- Illinois Arborist Association City in the Garden Tour

REGISTER NOW!

Win a chance to get your full conference registration for FREE by registering online by July 8th.

HEADQUARTERS HOTEL:
The Sheraton Chicago Hotel and Towers
301 E. North Water Street
Chicago, IL
Single/Double $191/night + taxes

ADDITIONAL HOUSING:
Doubletree Hotel
Chicago
Magnificent Mile
300 E. Ohio Street
Chicago, IL
Single/Double $139/night + taxes

Visit www.isa-arbor.com for conference updates and for housing reservation information.

SAVE THE DATE:
July 23-28, 2010
Awards of Merit go to Dan Christie

Presented by Terrill Collier at TCIA’s Winter Management Conference in February.

The Award of Merit is the most prestigious recognition that the Tree Care Industry Association gives. Members of the TCIA Awards Committee this year were past chairs – Scott Packard, Jeanne Houser and Tom Golon.

There are times when a project or program is completed and everyone can point to its culmination and say thank you to the people who devoted their time and effort to make it happen. At other times, the work of dedicated members may go unnoticed. The work of this year’s Award of Merit winner falls into the usually quiet but always effective category.

TCIA’s Tree Care Academy has evolved over the years to become seven, separate, step-by-step training modules for tree care employees. In the beginning when this was a mere idea, this year’s honoree was one of the driving forces to develop training programs for members so they could teach employees how to work safely and profitably.

Quiet service may be the best description of this year’s honoree. He devoted his time over the years to the committees for Excellence in Arboriculture, Education and Employee Development, Winter Management Conference Site Selection and the Government Affairs Committee.

For six years he served as a member of the TCIA’s Board of Directors. During his tenure, all who served with him described him as very effective – a board member who was never afraid to broach any subject. While a man of strong opinions, he was also willing to try to see all sides of an issue and insisted that discussions were comprehensive. Of course, that doesn’t mean he was willing to allow discussions to go on forever when he felt the board or committee were plowing over ground repeatedly.

Perhaps most importantly, in times of rapid change and the launching of new strategic initiatives, he insisted the association stay true to its values and ethics. This was particularly true in his insistence on looking out for the interests of the average member.

After six years on the board, it was his time to run for chair. Because of the demographics of the time, a race between candidates would have been needed. Instead, he stepped away from a more visible role and declined to run, feeling satisfied with the significant contributions he had already made. This typifies his commitment to service and effectiveness over recognition and the center stage.

Every year, one of the hardest things TCIA faces is the transition of the Board, which involves the loss of tremendous talent. That was certainly true when this year’s award of merit honoree, Dan Christie, stepped away from the board. We are grateful he has stayed quietly involved with the association and honor him here today. Because Dan left as a board member and not as a past chair, his contributions have been under appreciated. Be clear, Dan brought his farm boy good sense, and practical insight to every strategic decision our organization faced. His honesty, opinion and humor were freely given and always appreciated. We are a far stronger and more effective association today and into the future because of his leadership.

So today we honor with the Award of Merit one of our quiet champions, Dan Christie.

Free PPE Compliance Guide encourages safety

The purpose of this month’s TCIA member giveaway, the Personal Protective Equipment Compliance Guide & Checklist: Requirements for Arboricultural Work, is to help members develop PPE policies and procedures that are fully compliant with both OSHA and ANSI requirements.

There are situations in the everyday work of the arborist that expose the individual worker to hazards. Whenever feasible, recognized hazards must be removed from the work environment or reduced through the use of accepted safe work practices or other means. But often the hazards cannot be completely eliminated; and PPE provides the employee with additional protection.

PPE alone should not be relied upon to provide protection against hazards, but should be used in conjunction with guards, engineering controls, and safe work practices. This Guide clarifies the overlapping requirements of OSHA General Industry (Part 1910) standards as well as guidance from the ANSI Z133.1-2006 Safety Requirements, as they pertain to PPE.

Find your free TCIA member copy of this guide included with the print version of the April Reporter newsletter. For additional copies, call 1-800-733-2622.
Each year, the chair and president are given the privilege of selecting someone for special recognition. The Pat Felix Volunteer of the Year Award is presented to a TCIA member who has gone above and beyond the call of duty by committing time and effort to the success of the industry and TCIA.

One of the primary issues facing our industry – now and into the future – is the issue of sustainability. Finding a place for commercial arboriculture in the green movement is not simply a matter of deciding on a project, gathering funds, and heading for the media. If our industry is to reclaim the name, the moniker “green industry” from the solar panel and replacement window installers, we have some work to do.

Sustainability is a threat to how we’ve done things in the past. We must change practices and attitudes. But how – and to what end? What does it mean in our industry to advance green? Expand the proper use of A-300 practices to landscape architects and landscape contractors? Reduce or reuse more of our waste stream? Include more organic concepts in our care?

Companies recognize there have been changes in our regulatory environment at the national, state and federal levels. Much needs to be done in the years ahead to ensure that others don’t define our role for us – that science, not wishful thinking or fear, will guide us to a place where we continue to serve the environment, our clients and our employees and our businesses bottom line.

We do not necessarily have a unified perspective in our membership on the definition of what it means to be green, nor what is acceptable regarding sustainability practices. Answering these questions requires people who are willing to devote time and effort – and that means that companies within our industry must be willing to devote the resources necessary to allow their employees to volunteer their time to make this happen.

Leadership is key for the process to work. There are many leaders of this movement in the world outside of tree care, but within our own ranks there are very few who have taken the lead.

One person has taken the lead – by serving on TCIA’s Sustainability Task Force, engaging ISA’s audience with a presentation on Greening our Business Sustainability, and by providing an active presence with the Sustainable Urban Forests Coalition. For the leadership he has provided so far and in expectation of more to come, this year we honor Greg Ina of the Davey Tree Expert Company with the Pat Felix Volunteer of the Year Award. Congratulations, Greg.
Advancing Arboriculture Award for MIOSHA

This award is given to a governmental agency, institution or green industry partner, that has worked to advance legislation, regulation or practices favorable to the tree care industry. This year, the award goes to some very deserving folks at Michigan OSHA’s Consultation Education and Training Division – Connie O’Neill, Joe Barela and William Lykes.

Due to a series of fatalities, MIOSHA launched a “Tree Trimming Industry” initiative in October 2006. The MIOSHA Green Industry Alliance, a collaborative partnership, was formed that pledged to work together to foster the highest standards, good work ethics and safe work practices for all professional sectors of the green industry.

The Alliance is comprised of the Arboriculture Society of Michigan (ASM), Michigan Green Industry Association (MGIA), Michigan Nursery and Landscape Association (MNLA), Michigan Turfgrass Foundation (MTF), Tree Care Industry Association (TCIA) and the Utility Line Clearance Coalition (ULCC).

At the outset, the various groups had little interest in talking to one another. There was a high level of distrust of MIOSHA, and none of the partners had the experience of an Alliance to contemplate what was possible. TCIA spearheaded an ambitious agenda that included industry education and training, educating MIOSHA personnel, and regulatory reform. As a result of the alliance, members had the opportunity to educate virtually all MIOSHA compliance personnel on our needs and concerns. In the near future we plan to collaborate on a field training day for practitioners. We will also begin to revise MIOSHA standards.

MIOSHA’s Consultation Education and Training Division, specifically Connie O’Neill, Joe Barela, and Bill Lykes exhibited great willingness to understand and meet the industry’s needs. We thank them for advancing arboriculture in the state of Michigan and serving as a model for what could be positive developments in other states.

TCIA’s annual Accident Survey deadline is April 15: Please take part

Please participate in the TCIA Accident Survey for 2008-09 Operations. You should have received a copy as part of the cover wrap on the March TCI Magazine, or as an insert in the March or April Reporter TCIA member newsletter. If not, please contact TCIA at 1-800-733-2622, complete it online at www.tcia.org, or e-mail Peter@tcia.org. The deadline for responding is April 15.

As always, your response will be treated with the strictest confidentiality; data will only be shared in aggregate form with the outside world. Thank you, in advance, for participating.

The most successful tree care companies are Accredited – setting the standard for credibility, skill, ethics and professionalism in the tree care industry.

Few of them started out that way.

Your company IS ready to meet its full potential – dive in

( the water’s fine!)

Call (800) 733-2622 and ask about TCIA Accreditation today.
Snow-covered tree branch snaps, kills man in Central Park

A Brooklyn man walking through Central Park was killed February 25, 2010, when he was hit in the head by a snow-laden branch. Elmaz Qyra, 46, was found by a passerby on a promenade known as Literary Walk near E. 69th St.

By the time paramedics arrived, Qyra, of Dyker Heights, was dead, according to a Daily News report. The branch, about 20 feet long and 6 inches in diameter, fell from an American Elm.

Submitted by Jon Stauffer of DeWitt, Michigan.

Man dies of while trimming tree

A Sherman, Texas, man was believed to have died of natural causes while trimming a tree February 25, 2010, at his home. Richard Dewayne Mackey, 47, was pronounced dead at the scene.

Mackey was working with family to clear limbs from a large tree, its branches growing around electrical wires. Mackey, the owner of North Texas Tree Service, was in the tree; another person was on the roof at the property; and others were on the ground, according to a Herald Democrat report. The workers were sawing off limbs, then lowering them to the ground with a rope when, apparently, Mackey went into distress. The Fire Department rescuers had to shut down power before getting Mackey to the ground.

Two trimmers electrocuted by power line

Two Spartanburg, South Carolina, men died by electrocution February 28, 2010, when an extension ladder they were using to trim a tree at their home made contact with a power line. Positive identification could not be made until the next day due to the extent of the victims’ injuries. One was later identified as Chang V. Yang, the home-owner at the address.

The victims were removing limbs on a tree when the accident occurred. The passing motorist who reported the incident first thought he was witnessing a brush fire before realizing that two victims were involved. Firefighters had to stand by for more than 20 minutes until the power line could be disconnected, according to the Spartanburg Herald-Journal.

Send your local accident reports to editor@tcia.org.
Since Robert Redford made the movie “The Horse Whisperer,” other stories have appeared about people saving wildlife. In early March, there was a report on the Internet about the Eagle Whisperer, a chap who untangled a yellow nylon rope from the leg and talon of a bald eagle entangled by the rope tied to a barbed wire fence. Another bald eagle stayed perched on a wire close by. The rescuer thought that might be the victim’s mate. The eagle is recuperating in a large bird pen and soon will be taken to the area where it was found.

As we work in trees we find many elements of nature that relate to trees, everything from reptiles, insects, nests and uncommon growth of trees. This tale is about my work at a client’s, Edna’s, house where I had worked her trees on two previous occasions. This assignment included the removal of one major limb of a co-dominant Lombardy poplar that became a risk to her roof in the event of bad weather. The crotch angle of the tree was about 70 degrees or more, so the final cut in the branch collar looked like it would be quick and easy.

I had two ground men with me and I went up in the lift bucket. Both ground men work together in the community as Boy Scout leaders and one of them is a volunteer fireman and first responder. They regard life and view nature with the same high regard as I do.

As I began removing the major limb in sections to rope-drop safely, I observed a mourning dove flying around the yard, from wire to wire and wire to limb. She would not leave the area but I didn’t give it much thought.

When I got the major limb cut down to the last foot or two near the trunk, I moved my top-handle limbing saw toward the crotch to make the final cut. I stopped suddenly, for there was a bird nest of twigs and pine needles with two fledgling doves huddling close together.

Now I knew why the dove was excited and stayed so close to the tree. I stopped the saw and put it back in the bucket scabbard. I removed the entire nest with the doves and passed it down to one of the ground men who placed it carefully in a nearby pine tree crotch.

Before we left that day I spotted one of the young doves standing on the pine limb beside the nest. We packed up the equipment and then looked around the yard to try to find the other baby dove, but it was gone.

The outcome of their lives will not be known, but we did all we could to relocate them.

Sherman Anderson owns and operates Best Tree Service in Mountain View, Arkansas, and is a TCIA member.
Transtect™

broad-spectrum, systemic insecticide

Fast, Profitable Soil Application

Superior control of hard and soft scale
Pine Needle, Elongate Hemlock, Euonymus, Magnolia, Calico, Fletcher and Kermes

Excellent spring and early summer treatment for Season Long Control

Field studies have shown rapid control of Hemlock Woolly Adelgid

Transtect™ is a soil applied, systemic insecticide that provides season long control of a broad spectrum of pests. Its unique properties provide rapid uptake and efficacy. Transect can be used for a variety of situations where fast results are needed including recovery treatments on infested trees.

Insects Controlled: Adelgids (such as: Hemlock Woolly), Aphids, Emerald Ash Borer, Two-lined chestnut, Bronze birch, Glassy-Winged Sharpshooter, Japanese beetle (adults), Lacebugs, Leaf Beetle (such as Elm, Viburnum), Leafhoppers, Leafminers, Plant bugs, Psyllids (such as Asian citrus), Soft Scale, Armored Scales (such as: Pine Needle, Elongate Hemlock, Euonymus)

Transtect moves into the plant faster than imidacloprid and provides season long control

Protection from Armored & Soft Scale
Magnolia treated with one application of Transect (left) and untreated control with significant damage from False Oleander Scale.

For product information, sales, and technical support contact our Solution Center
www.treecaredirect.com  1-877-272-6747  info@treecarescience.com
How fuel-efficient is your chipper?

Increase your fuel-efficiency by 40% with our chippers.

All 3 units are available with our exclusive Kubota 48HP diesel engine which is 40% more fuel-efficient than the traditional 85HP units offered on these machines. This line-up features chippers for 6”, 9” and 12” material and includes a self-feed drum, a control-feed disc and a control-feed drum unit.

**DC 912A (9” capacity control-feed disc)**
- Compact, high-performance design
- Exclusive patented panic bar system
- FeedSense® electronic feed control system
- High-capacity (150 fpm) hydraulic feed system
- Standard 48HP diesel engine

**CFD 1217 (12” capacity control-feed drum)**
- FeedSense® electronic feed control system
- Exclusive patented panic bar system
- Height-adjustable discharge chute with hand-crank 360° rotation
- Low-profile hydraulic-lift cylinder
- Innovative Chevron Feed™ system

**WC 126A (6” capacity self-feed drum)**
- Field-proven, rugged design
- Drive system designed for 48HP diesel engine
- No hydraulics
- Aggressive 200 fpm feed rate
- Innovative serrated blade design

1.800.269.5188
For more information, email chippersales@altec.com or visit us at www.altec.com.
Treat hundreds of trees quickly, profitably.

Fast process boosts profits
With ArborSystems' Direct-Inject trunk injection system you can treat almost any tree in five minutes or less. No drilling, no guarding, no waiting. Treat more trees every hour and boost your profits with every tree you treat.

High-Volume Kit and 1000 ml chemical packs
Make 1000 injections without reloading chemical. One arborist reported making 797 successful injections in under 4 hours. Talk to anyone who's used the Direct-Inject system. They will tell you there is no better way to treat trees, and no better way to make money.

Don't Drill...Direct-Inject™
The Wedge Direct-Inject system is the only no-drill trunk injection system. It protects tree health and eliminates the permanent wounding caused by drilling.

GreenTree Pro
NUTRIBOOSTERS 0-15-10 WITH IRON
Help trees green up, leaf out
One application helps trees overcome chlorosis and recover from drought or transplant stress. Get ready now; apply in spring or early summer.

Pointer®
INSECTICIDE
Control EAB, other key pests
Since 2001, Direct-InJECT applications of Pointer have saved thousands of trees from Emerald Ash Borer, preventively and curatively, even in heavily infested areas. Also effective against adelgids, aphids, Pine Bark Beetles, and many other destructive pests.

Mastiff®
PGR - PLANT GROWTH REGULATOR
Manage growth, reduce trimming
Mastiff condenses growth up to 70% over three years while boosting drought and stress tolerance. Ideal where trees interfere with views, power lines, or sidewalks.

Insecticides – PGRs
Fungicides – Nutrients
www.ArborSystems.com
800-698-4641

Circle 104 on RS Card or visit www.tcia.org
ALL TERRAIN AERIAL LIFTS

The most awesome, compact, versatile, self-propelled, Indoor/Outdoor, All Terrain Tracked Aerial Lift available today!

• 80ft. working height
• 35ft. horizontal • 34.5in. wide
• Fits thru a 36in. gate or door
  • Indoor/Outdoor use • Fully Insulated (46kv) option • Articulating
• Electric and/or Diesel Power • High strength steel booms • Auto leveling
  • Extremely low ground pressure • High speed mode
• ANSI, OSHA & CSA compliant • CA emission exempt • Quality built in USA!

• Go anywhere! All units towable behind a pickup truck!
• Get the competitive edge over everyone else!
• Go where no one else can go! • Do safely what no one else can do!

allterrainaeriallifts@gmail.com • (559) 225-8000

Circle 101 on RS Card or visit www.tcia.org
In this issue:

4 Features

6 Advertiser Index

6 Fix or Replace - Depreciate or Write Off
By Mark E. Battersby

14 Classifieds

TCI Equipment Locator publishes twice a year, in the spring and fall. For advertising specifications and rates, contact Sachin Mohan at Tree Care Industry, 136 Harvey Road, Suite 101, Londonderry, NH 03053. (516) 625-1613 mohan@tcia.org, or www.tcia.org

Please tell these advertisers where you saw their ad. They appreciate your patronage.

Reader Service No. * Page No.
101. All Terrain Aerial Lifts ......................................... EL3
102. Altumamats, Inc. .............................................. EL9
103. American Arborist Supplies ......................... EL6
104. ArborSystems ........................................... Inside Front Cover EL2
105. Buckingham Manufacturing Co., Inc ............. EL11
106. Corona Clipper ............................................. EL9
107. DICA .......................................................... EL12
108. Forestry Suppliers, Inc. ................................. EL8
109. Independent Protection Company .................. EL11
110. Leonard Manufacturing ......................................... EL7
111. Maranuk Equipment ............................ Inside Back Cover EL15
     Maranuk Equipment ..................... Back Cover EL16
112. Northern Atlantic Financial, LLC ................. EL13
113. Rotochopper, Inc. .......................................... EL5
114. Ryan’s Equipment ........................................ EL8
115. Tree Management Systems/Arborgold .......... EL6
116. Weaver Leather, Inc. ................................. EL10

* Please circle this number on the Reader Service Card for more information, or go to www.tcia.org, click on Publications, then Advertiser Information and complete your request online. You may also type the following direct secure link into your Web browser: http://secure.tcia.org/magazine/advertiserList.aspx .
“Perfect In One Pass”™

Wood chip disposal problems driving you NUTS?

Tired of making ten calls and driving all over town only to pay someone else so you can dump those chips?

STOP!

- Colored mulch is HOT!
- Why not let consumers pay you for every load of chips you generate?

The Rotochopper CP-118 will re-grind and color those chips making perfect colored mulch in one pass.

It's completely mobile
- Pulls with a pickup
- Loads with a skid steer

Don't believe it? Call today for a FREE video or onsite demo and we'll prove it!

608-452-3651

Circle 113 on RS Card or visit www.tcia.org

217 West Street
St. Martin, MN 56376
320-548-3586 P
320-548-3372 F
http://www.rotochopper.com
info@rotochopper.com
In today’s economy, the question is often not whether to fix or replace equipment, fixtures, business assets or even the building housing the tree care operation – it is which path is affordable. Will the tree care business benefit more from an immediate write-off for the cost of repairs or does the lack of profits and a big tax bill mean smaller depreciation write-offs in later, hopefully more profitable years will be more rewarding?

There is also the question of just what the Internal Revenue Service will allow. The tax collector’s power to reclassify an immediate expense deduction as a smaller series of depreciation deductions stretching over the life of the property is yet another factor that must be considered.

Repair or depreciate

Every tree care business can, of course, deduct all of the “ordinary and necessary” expenses paid or incurred during the tax year. Unfortunately, a deduction is not permitted for any expenditure that is a capital expense.

An expense is considered a capital expense if it adds to the value or useful life of property or adapts property to a new or different use. Generally, capital expenses are deducted by means of depreciation.

Expenses that keep property in an ordinarily efficient operating condition and that do not add to its value or appreciably prolong its useful life are generally deductible as repairs. Repairs include most routine maintenance chores, with the notable exception of a new roof, which is considered to be a capital expenditure.

Capital means permanent

The expenses incurred in operating a tree care business are fully deductible in the year incurred. In contrast, capital expenses may, at best, entitle the tree care operation to a tax deduction that must be taken in installments over a number of years.

One school of thought says any legitimate business expenditure that does not create an asset or benefit the tree care business for a period longer than one-year is an “expense.” Many arborists, tree care business owners and managers believe that normal inspection, cleaning and testing; and the replacement of parts with comparable and commercially available and reasonable replacement parts, are routine maintenance.

In the eyes of the IRS, however, those expenditures are all-too-often considered part of capital improvements and their cost recoverable only through depreciation deductions. In fact, any expenditure that contributes to prolonging the life of equipment, or any business property, is considered by both lawmakers and the IRS to be a capital expense and must be treated – and deducted over the same period – as the underlying asset.

Capital means permanent... ...at least to some

Generally, a capital expenditure either adds an asset to the business or increases the value of an existing asset. In other words, the amounts paid to acquire new property for resale, such as inventory*, or to keep for one or more years, are capital expenditures. Capital expenditures also include the amounts paid by a tree care business to improve equipment or property it already owns.

* Generally, inventories do not have to be maintained by small businesses – except in the case of goods held for sale or consumption and raw materials and supplies that won’t be quickly consumed or used. Normally, a small service-type business would write-off the expense of products expended in the normal course of activities. If, however, you were to take advantage of a deal on a large amount of fertilizer, cabling equipment or any such product that might last more than one year, or if you treat the items as a separate charge when you bill customers, an inventory would be required.

Whether expenditures are a deductible repair or a capital improvement often depends on the context in which the expenditure was made. If an expenditures was, for instance, made as a part of a general plan of rehabilitation, modernization or improvement to equipment or other business property, the expenditure must usually be capitalized even though, standing alone, the expense would be currently deductible.

In the past, the courts often ruled that capital improvements and ordinary repairs made simultaneously were capital expenditures. The courts often drew an analogy between constructing a new building and
Replace a Full Set of Teeth for ONLY $180*

The M1 Silver Cutting System from Leonardi is just stronger, cleaner, faster and easier. The M1 Silver is less expensive than anything on the market! For your 60hp stump grinder you can purchase an M1 Silver for only $1,430 including teeth, after that ONLY $180 replaces them all!

A DEAL YOU CAN’T PASS UP!

* Hub configurations available for most machinery models. Give us a call for more information.

CALL TODAY FOR OUR FREE PRODUCT CATALOG: 1-800-537-2552

rehabilitating an older one. The courts reasoned that during building construction, expenditures associated with carting away trash, painting windows or even washing windows could not, realistically, be separated from other building costs and, thus, must be capitalized.

**New safe-harbor guidelines**

Under a unique “safe harbor,” the maintenance performed on equipment or business property is not generally considered as improving that property (and, therefore, is currently deductible). Routine maintenance would be the recurring activities that a tree care business owner or manager expects to perform as a result of its use of the equipment or property to keep it in ordinarily efficient operating condition. The tax rules allow repairs made at the same time as an improvement, but which do not directly benefit it or which were made strictly because of the improvement, to be deducted as repairs.

Using the IRS’s example, a company owning several trucks decides to replace the existing engines and beds with new components. All of these costs would have to be capitalized because they are so-called “restoration costs.” If the company decides to paint the truck cabs, and replace a broken tail light (both repair costs if made separately) at the same time the new components are installed, the costs would be part of the capital expenditure. They would have to capitalize the cost of painting (treated as an expense that directly benefits or is incurred because of the truck restoration). Of course, if not done as part of the larger project, the company could currently deduct the cost of repairing the broken tail light (treated as an expense that does not directly benefit, and is not incurred because of, the truck restoration).

**Viva la difference**

Among the IRS’ tax rules is another safe harbor, one designed to virtually guarantee the immediate deduction for repairs and maintenance. The new safe harbor applies if, at the time the equipment or property was placed in service, the tree care business reasonably expected to perform the activities more than once during the life of the equipment or business property.

In other words, whether an expense is “routine maintenance” would depend on factors such as the recurring nature of the activity, industry practice, manufacturers’ recommendations, the taxpayer’s experience and the taxpayer’s treatment of the activity on its applicable financial statements.

**The balancing act**

At the heart of our tax system is the principle that a tree care business’s income for the tax year should only be offset or reduced by expenses that contribute to earning the income for that tax year. If, for example, floor space is added to the operation’s business premises, or a new business vehicle is purchased, the business has acquired an asset that will benefit the operation for a number of years.

If, on the other hand, the tree care business were to deduct the full cost of that asset in the year it was acquired, income for that year would be understated – and over-
stated in all later years that asset remained part of the tree care business. Thus, instead of permitting immediate deductions for the cost of equipment, assets or property of a more permanent nature (that is, items that will benefit the business beyond the current year), the tax rules require such expenditures to be capitalized.

How confusing is the IRS’s reasoning? Consider an example offered by the IRS: A small retail shop suffers storm damage to some of its roof shingles. Redoing the entire roof with wood shingles would not have to be capitalized as a betterment to the shop and neither would redoing the entire roof with asbestos shingles if wood shingles were not available. However, redoing the entire roof with shingles made of a lightweight, composite material that is maintenance free, non-absorptive, has a 50-year life and a Class A fire rating, would have to be capitalized as a betterment to the shop.

Ignoring the obvious
For many tree care businesses, seeking an immediate expense write-off is the only strategy. Faster write-offs for “bonus” depreciation, the Section 179 deduction that creates first-year deductions, or expensing for some capital expenditures temporarily inflate the write-off. What about a troubled tree care business, however, one that is...
struggling to keep afloat, or a new business, neither of which has much incentive to minimize taxable income and/or maximize current deductions. (That is because a troubled business would already have little income and pay taxes—if at all—in a low tax bracket. Postponing a deduction, where legal, would reduce taxable income—and the tax bill—in later years when income and tax bracket are higher. An exception might exist with a money-losing business that wants to take advantage of the temporary increase in the net operating loss (NOL) carryback period by maximizing deductions in a loss year, but preliminary figures seem to show few “troubled” businesses taking advantage of NOLs.)

Everyone knows that the ever-vigilant IRS will quickly jump onto any effort to “distort” the income of the business. Usually this means the IRS reclassifying a deduction you claimed as an expense, making it a smaller depreciation deduction because results will be noted in a period longer than one year. Ignoring an immediate expense deduction is an option, since it will not distort the tree care operation’s income. The reward would be down the road, taking that deduction in a more profitable year with taxes in a higher bracket. Would the same be true if an otherwise deductible expense were labeled as a capital expenditure and claimed over a number of years be an acceptable strategy? The complexity of the tax laws and the difficulty of that particular question are both enough to warrant seeking professional advice.

While far from being simple, the difference between the costs of maintenance or repairs and capital improvements seemingly boils down to the impact on the tree care business, its equipment or other business property. Spelling out a periodic schedule for maintenance and regular routine repairs can help. Clearly separating routine maintenance or repair expenditures from a larger plan of rehabilitation or modernization can also help maximize the current tax deduction for maintenance expenses—if that will benefit the tree care operation’s tax bill the most.

**Postponing a deduction, where legal, would reduce taxable income—and the tax bill—in later years when income and tax bracket are higher.**
Lightning Protection for Trees
Preserve and Protect Your Client’s Trees

Install systems on:
- Golf Courses
- Estates
- Historic Sites
- Valuable Trees

Limited Investment
Quick Profits - Free Quotes

Call IPC today and request a tree kit folder. The folder provides you with our price list, reprints and other information related to providing this service.

Independent Protection Co., Inc.
800-860-8388 ☑️ www.ipclp.com

Buckingham Introduces the
BuckBlocks Climbing System 5006S
& BuckBlocks Rigging System 5006L

- Light Weight.
- Patent Pending.
- Designed To Ease Climbing And Rigging.
- Reduces Premature Wear On Climbing & Rigging Lines.
- Helps Eliminate Damage To Tree Limbs Normally Caused By Friction.
- Set And Removed From The Ground Or Another Tree Using A Throwline And Throwbag.
- Once Set, 2 Part Rope Channel Snaps Together Using Powerful Magnets In Self Aligning Frame.

- Better Bend Radius For Rope And An Improved Running Surface With Dual Rotating Sheaves.
- 5006S Climbing System Designed For Users With Max Weight Of 350 lbs. When Fully Equipped.
- 5006L Rigging System Max Load Limit = 3 Tons.

Tel: 1-800-YES-BUCK (1-800-937-2825)
www.buckinghammfg.com
Selling Retired Equipment
Hi-Ranger & Aerial Lift of CT lifts on Int’l and Ford Chassis. All are diesel; forestry & rear-mount pkgs available. Diesel self-feeding chippers available. Contact Paul (585) 295-2412.

Owner Retired – Equipment Sale
1993 Chevy C60 V8 5spd chipper truck 68k mi. $15,900. Altec whisper chipper 16” drum style 6 cyl 370 hrs $11,500. Rayco Super Jr stump machine 1625 & trailer $5,000. Call (920) 235-5165.

Spider Lifts for Sale
New, demo and used. Different brands from 52-foot to 102-foot working height. See them at www.TrackedLifts.com or call Mike Hrycak at (201) 206-2464.

2005 Brush Bandit 1590
$27,500, John Deere 140HP, 1450 hrs, winch, auto-feedplus, hydraulic lift cylinder, live hydraulics, aluminum fenders, block heater, twin disc clutch, one owner. Call Broad Oak, Peterborough, NH, (603) 673-1513 dan@broadoaktree.com

2001 International 4700 4x2
$14,500. 25500 GWW, 49100 mi. 210HP diesel T444E, 14’ x 8’ dump body / pressure treated chip box. 7 speed manual, 7 Arbortect tool boxes, AC, block heater. Call Broad Oak, Peterborough, NH (603) 673-1513 dan@broadoaktree.com

For even more up-to-date Help Wanted ads, check out TCIA’s Web classifieds at www.tcia.org
Affordable Financing Options Available
Seasonal, Deferred and Skips

What Do We Finance?

Bucket Trucks • Cranes
Stump Grinders • Skidders
Brush Chippers • Chip Trucks
Tub Grinders • And More!

Set Up Your Line Of Credit Today!

Financing For The Arborist Industry!

Before You Finance, Call For A Comparable Quote! We Would Love To Save You Money!

JoAnn Cucciare: (800) 710-4361
410 Turnberry Way, Souderton, PA 18964 / Fax: (800) 711-0468
Email: joann.cucciare@comcast.net

www.northernatlanticfinancial.com

Circle 112 on RS Card or visit www.tcia.org
Tamarack Forestry is selling bucket truck surplus

Aerial Lift of CT Buckets mounted on 1996-1999 Ford, GMC & Int’l trucks. All trucks are diesel, average miles are 50,000 & booms are in excellent shape. Prices are $12,000 to $15,000. Call Matt at (315) 323-2303 or 1-800-858-0437.

Ropes, Ropes, Ropes

All types and brands of professional arborist climbing, lowering and rope accessories at warehouse prices. Call for current price list. Visa, MC, AX. Small Ad – Big Savings, since 1958. 1-800-873-3203.

Opdyke Inc.


Allied Equipment of Wisconsin

Stumper guard OEM Bucket Trucks to 70 ft., Stump Grinders, Chippers, aerial lift parts & service. Rayco parts. We rent Rayco/Forestry Mowers. www.alliedutilityequipment.com 1-800-303-0269.

2004 F450 Spray Rig Truck

Flatbed V8 Diesel, White, AC, Airbags 85K miles; Sale: $22K. Call (540) 822-5611 or e-mail arborartist@gmail.com

DuMorr Lift Rentals

We pride ourselves on supplying the best & newest equipment on the market. Up to 75’ of working height for rent or sale. Call for rates & availability. Servicing New England & NY. 1-800-258-1010 or dumorrlliftrental@gmail.com

Grapple Truck


DuMorr Lift Rentals

We pride ourselves on supplying the best & newest equipment on the market. Up to 75’ of working height for rent or sale. Call for rates & availability. Servicing New England & NY. 1-800-258-1010 or dumorrlliftrental@gmail.com

ArborGold Software

Complete job management! Tree Management Systems, Inc. delivers cutting edge software specifically designed to help tree care companies close more sales, create repeat business, reduce cost and monitor crew productivity, works with QuickBooks. Visit our Web site www.ArborGold.com for a FREE in-depth video demo or call 1-800-933-1955 today for more information.

Save the date!

See Equipment!

Attend Workshops & Seminars!

November 11-13, 2010,
TCI EXPO Pittsburgh!

TCI EXPO 2010 will be held at the David L. Lawrence Convention Center in Pittsburgh, Pennsylvania.

Pre-Conference Workshops will be held Wednesday, November 10, and the trade show floor and seminars will be open Thursday, Friday, and Saturday, November 11, 12 and 13.

Conference seminars and workshops will be offered during the day on Thursday, Friday and Saturday.
Now Selling New Altec!

www.maranukequipment.com
(2) 1990 International w/ a Turbo Diesel Engine, 5 Speed Trans., 2 Speed Rear, 5,000 lbs. Capacity IMT Knuckleboom w/ 27 ft. of Hook Height, 11 ft. Flatbed, New Paint, Low Miles, Excellent Condition, $14,500

1990 Ford F800 Crane Truck, Turbo Diesel Engine, 6 Speed Trans., 18 ft. Flatbed, 22,000 lbs. Capacity, 65 ft. Hook Height, RO Stinger Crane, Excellent Condition $16,500

1994 Ford F700 National Knuckleboom Crane Truck, 9,000 lb. Capacity 34 ft. Hook Height, Turbo Diesel Engine, 5 +2 Trans., $15,500


2001 Freightliner FL70 CAT Diesel Engine, 5 Spd. Trans., 14 ft. Forestry Body with Removable Roofs, Palfinger Knuckleboom Crane w/ Winch, 32 ft. of Reach, New Paint & Tires, Ready to Go to Work!

2003 Freightliner FL80, 300 HP Cat Eng., 8 Spd. LoLo Trans., 23 1/2 Ton Terex 103 ft. HH, LMI Cap Alert Overload Shutdown, Anti Two block Sys., 4 Outriggers, Front Stabilizer, A/C, Stereo, 6,000 Miles, $94,500


1996 GMC Topkick, Cat 3116 Turbo Diesel Engine, Auto Trans., 11 ft. Southco Chip Box, New Paint, Ready to Go to Work, $14,500


2000 International 4700 DT 466E Engine, 7 Speed Trans., 60 ft. WH Versalift Bucket, 11 ft. ArborTech Chip Body, Low Mileage, New Paint & Tires, Excellent Condition, $42,000

www.maranukequipment.com

Circle 111 on RS Card or visit www.tcia.org