For all the beauty and character that trees lend to a town, development project or other public space, they also can cause great concern and potential liability when their condition becomes questionable. Municipal risk managers face the responsibility and challenge of reducing the risk of aging or diseased trees that may injure people or damage property.

Preemptively chopping down healthy trees is not the best solution to managing this risk. However, legal risks associated with maintaining trees can prove substantial. Several courts around the country have held property owners responsible for tree hazards that they may—or may not—have known about.

Marty Shaw is a Registered Consulting Arborist (RCA) who can sort out the risks associated with the trees in your public spaces. As the most authoritative experts on tree care issues, RCAs undergo intensive training and skills development to earn the industry’s highest professional designation.

In a comprehensive tree risk assessment, the RCA can measure tree damage and evaluate tree health and risk factors to recommend which trees to sacrifice and which to salvage. In most cases, visual examination of the tree roots, trunk, branches and leaves is adequate. In a high-risk situation or one where defects are suspected but not readily seen, the RCA may conduct an in-depth tree assessment using specialized tools and techniques.

Typically, the risk assessment includes a ranking of the assessed trees on the property ranging from low- to high-risk. If a serious tree hazard is identified, immediate removal is warranted to avoid danger. Trees that exceed a reasonable risk of possible failure in the future also are identified and should receive prompt corrective action.

When no immediate danger is posed, tree defects can be addressed through corrective maintenance, such as pruning of defective branches. If an aging tree is of special historical or landscaping value, cabling or bracing can be employed to help it remain secure. Other recommended maintenance may include watering, mulching and pest control.

Even a trained expert cannot predict with complete certainty whether a tree will fail or continue to grow and thrive. Extreme weather conditions may cause tree failure, and even the most thorough assessment may not uncover internal defects in a tree with a healthy and structurally sound appearance.

Consulting with Marty to monitor new plantings or young trees can provide an early opportunity to shape trees to prevent problems from the outset. He can also provide tree value appraisals and offer expert legal testimony in cases regarding tree issues. What’s more, he can even help you develop policies and procedures for dealing with potentially hazardous trees, and train your staff to properly detect and correct common tree hazards, as well as, other maintenance tasks.

The payoffs of effective tree management include healthier and longer-living trees, lower landscaping costs, and most importantly, fewer tree-related accidents and injuries—that results in reduced risks, fewer claims and less liability.

—GSC
Micro-injection a Missing Link in Your IPM

Recent technological advances have helped micro-injection gain an edge in plant nourishment. Used with an existing integrated pest management program (IPM), micro-injection offers flexibility, environmental stewardship, and better performance for a surprisingly small investment.

With micro-injection, chemicals are placed directly into the sap stream of the tree, bypassing the energy expensive root absorption process and allowing the trees own transport system to move chemistry directly to where it can be best used. Let’s take nutrients, for example:

Once in the trees vascular system they keep on delivering their payload for up to 5 years. Micro-injection is not new. In fact, it has been around for over 50 years. Going back even further, some twelfth century Arabian manuscripts record that aristocratic gardeners of the period experimented with stem injections to alter the color and fragrance of ornamental tree blossoms. Legend has it that in the 15th century, Leonardo da Vinci experimented with boring holes and injecting lead arsenic into his apple trees to prevent thieves from stealing his fruit. Today, research across the globe continues to reveal surprising and often dramatic results when tree professionals use micro-injection to solve difficult tree problems.

In micro-injection systems, tiny holes are drilled in the tree. A feeder tube is then inserted in the hole and a pressurized capsule (filled with liquid chemothropical) is placed onto the tube. The liquid drains from the capsule, through the tube and is taken up in to the trees sap. After the tree takes up the fluid (usually in about 15 minutes) the capsule and tube are removed.

Micro-injected fertilizer also prevents other problems. Ground water is of vital concern to most communities. Of the 4 to 6 lbs of nitrogen fertilizer that is applied per 1000 square feet, only 1/10 of an ounce of nitrate is actually absorbed by the roots. The rest of that material is leached into the water table or microorganisms denitify it. That is a tremendous waste of fertilizer. With micro-injection, there is no wasted material, and our communities are safe from ground water contamination.

In addition to nutrients, systemic pesticides can also be injected into trees. With micro-injection, there is no collateral environmental damage from over-spray; no dead fish in ponds, no dead baby birds in nests, no damage to sensitive plants under or near sprayed trees, and beneficial insects on or near the site are preserved to continue controlling pests and disease. Micro-injection programs are specific enough to kill only pests that are actively feeding on or in the plant. Micro-injection is the environmentally responsible way to augment your IPM program.

A wide range of nutrient formulations, insecticides, fungicides antibiotics and combinations of these are already EPA registered and are ready to go to work for you, solving the most difficult plant problems. Although they work about as quickly, and for about the same cost, as sprays, the same chemicals applied as micro-injections last much longer. Some insecticide treatments work for up to two years after a single application. Comparatively, the longest spray residual is only about 4 to 8 weeks and soil treatments may take up to 3 months before the desired effect takes place.

Micro-injection treatment programs are making inroads into the main stream of arboricultural care. The technique is proven and has remained on the cutting edge of tree care for over 50 years.

If your tree is sick or you think that you may have a need, please give Marty a call to discuss your specific situation. If necessary, Marty will inspect your trees to determine their exact condition, perform a thorough tree health analysis, and then make recommendations (based on testing of soil and tissue samples if required) to give you the best options to choose from. Once you decide what your tree needs, than Marty can also help you find the right professional to get the job done to your specifications. Give us a call at 615-477-7889.
Space Invaders

Exotic insects are invading across the South. Insects, trees, shrubs, vines weeds, and plant diseases have crossed the borders and are coming to a town near you:

In the Fall of 2010, Emerald Ash borer was found on some ash trees near a truck stop in Loudon County Tennessee. These insects reproduce rapidly and kill ash trees within a year or two of the initial infestation. Emerald ash borer has a voracious appetite and moves rapidly from one tree to the next--sometimes traveling several hundred yards.

This is very bad news for Nashville—they have the largest ash tree population in North America. Once the infestation reaches the area, they will begin to devour ashes in the wild and in the metropolitan area. The insects will likely be arriving in Nashville within the next few years. Fortunately for homeowners, there are preventive treatments available. A combination of soil applied insecticides, nutrients and trunk injected chemotherapeutics can keep emerald ash borers from attacking and destroying trees while at the same time keeping populations of additional borers from exploiting neighboring trees in yards and in the wild.

If anyone would like to learn more on the subject, I will be speaking at the annual Tennessee Recreation and Parks Association meeting at Paris Landing State Park on October 4th, 2011.

If you have large ash trees and you want to keep them around, you may want to look into taking preventive measures now.

- Marty Shaw

Preserving Trees During Construction

It can be tempting to see trees only as obstacles during the construction process. But there is no denying that trees can be vital enhancements to the overall appeal of a building or project.

Increasingly, property owners are demanding preservation of trees during construction, and voicing serious opposition to outright removal of trees on building sites. On many projects, this can present a challenge, especially when trees suffer damage caused by construction vehicles, heavy equipment, material storage, soil compaction, root system disturbance and disposal of debris near trees.

That’s why builders are enlisting the help of people like Marty Shaw. Marty is Registered Consulting Arborist (RCA) #470, Marty is a tree industry expert with a wealth of experience in tree preservation.

As the most highly trained professional in Tennessee, he has undergone intensive training to earn the RCA designation from the American Society of Consulting Arborists, and he is highly sought-after as a resource for the construction industry. Marty has worked with builders, architects, developers and contractors to advise on how to design sites to preserve trees, as well as, how to protect trees during construction or expansion of buildings and roadways. He can identify which trees are worth saving, transplanting or even moving.

Often, tree preservation is addressed as an afterthought once construction begins. Bringing in a RCA after construction begins will result in great tree losses. It is advisable to include a RCA in the project from the beginning as a key member of the planning, design and building team. Involving a RCA from the start (especially during the process of selecting locations for buildings and roadways) will facilitate tree preservation on the site later on. In protecting trees from construction damage, a main focus should be to protect the critical zone of trees root systems prior to construction.

Some of the techniques for protecting trees and their roots during the construction process may include: installation of fencing to protect the root zone, installation of signage for preservation zones, preconstruction fertilization of key trees, planning of temporary roads to avoid trees, root pruning of trees where root disturbance may be necessary, implementation of an irrigation program, installation of special equipment post construction, and vertical mulching in areas of high soil compaction.

"If you have large ash trees and you want to keep them around, you may want to look into taking preventive measures"

Trees are the largest and longest lived organisms on the face of the earth.
Preserving Trees During Construction (continued)

Preserving trees—rather than bulldozing them—poses additional challenges to the already difficult task of completing major building projects on time and within budget. Marty Shaw is an RCA who can be invaluable in providing strategies for preventing trouble during and after construction.

Even a trained expert cannot predict with complete certainty whether a tree will fail or continue to grow and thrive. Extreme weather conditions may cause tree failure, and even the most thorough assessment may not uncover internal defects in a tree with a healthy and structurally sound appearance.

Consulting with an RCA to monitor new plantings or young trees can provide an early opportunity to prevent problems at the outset. Marty can also provide tree value appraisals and offer expert legal testimony in cases regarding tree issues. What’s more, he can train your maintenance staff to detect and correct common tree hazards and properly conduct standard maintenance.

The payoffs of effective tree management include healthier and longer living trees, lower landscaping costs, and most importantly, fewer tree-related accidents and injuries—that means less risks, and lower claims and liability.

Marty Shaw and Green Season Consulting are the answer to your problem if you need authoritative arboricultural experience and expert advice— even in the most challenging situations. Marty is a tree expert’s expert. Give us a call so he can discuss your project in detail to see how we can help.

You can reach us by calling 615-477-7889.

Marty Shaw, RCA #470