Tree Hazard & Liability Issues

By Sharon Lilly

Managing trees can be viewed as a process of risk management. All trees pose a certain degree of risk; as trees mature and grow larger, the level of risk increases. Obviously tree managers do not want to cut down all the large, mature trees in their care. Therefore, trees must be managed at a level of risk that is acceptable. Because arborists bear responsibility for any decisions made regarding the trees, those decisions must be based on the latest information and technology available.

IDENTIFYING POTENTIAL HAZARDS

The ability to predict tree failure is limited at best. You cannot always see defects, especially those inside the tree or beneath the ground, and the forces of nature are quite unpredictable. With experience, however, you can come to understand patterns of failure that will help you recognize risk factors. The key is to continually inspect the trees under your care so that you can detect, correct, and mitigate any problems before an accident occurs.

General inspection

Inspecting trees for hazards involves a great deal more than a casual stroll among them. Diagnosing tree hazards requires a fundamental knowledge of tree structure and physiology. It takes a trained eye to discern the difference between a minor flaw and a possible hazard. It is important to understand your goals and to recognize your limits, and to know when to bring in a specialist. And, defining the level of risk management is essential in deciding what action to take when a problem is detected.

When performing an inspection you should stick to a systematic and constant process. This will help ensure that you inspect every portion of the tree and do not miss any hazardous condition. First, assess the tree as a whole. Look for dieback in the crown. Take note of any lean or branches that extend beyond the rest of the crown. Then inspect the trunk, the root crown, and the root zone. Finally, examine the canopy of the tree. By sticking to a system, you are more likely to perform a more thorough inspection.

The ability to predict tree failures is limited, but careful inspection and recognition of potential hazards can reduce risk.

In many cases, you will find it necessary to investigate further than what can be accomplished visually from the ground. It may be necessary to have a climber ascend the tree for a closer look. Some trees may require a more in-depth evaluation of the root collar. Root collar excavations, however, are quite involved and it may be best to hire a consultant with expertise in that area.

RISK ASSESSMENT AND HAZARD REDUCTION

The primary goal is usually to identify hazards so that they can be reduced, thereby making the property safer for all. There are limits, however, to the intensity of the inspection and the budget for followup. Whether operating in-house or hiring professionals, the individuals doing the assessment and the management must agree on the level of risk to accept. Keep in mind that the owners and managers must exercise due care in the process.

Sometimes a tree hazard inspection is limited to a single tree, but often tree managers are given responsibility for hundreds or even thousands of trees. Ideally tree managers should perform a detailed scrutiny of each tree, but financial and staffing resources often prohibit thorough hazard tree inventories. Therefore, the trees must be categorized and given priority for their level of inspection. Trees in more remote locations will be given lower priority than those in highly visited areas. Larger, more mature trees should have more thorough evaluations because they are more likely to have defects and their size can present a higher potential for damage. Give extra attention to trees in areas where people congregate.

Develop a strategy for the assessment process. Document all observations, measurements, and recommendations. Use a hazard assessment form for consistency. The advantage is that you are less likely to miss any tree or site factors that could affect the evaluation.

If you have a detailed tree inventory with the trees marked and labeled on a plan, you are several steps ahead at this point. Each tree surveyed and evaluated must be documented on the plan. The assessment form should identify the tree's genus and species as well as the common name. Also, record the size, location, and a general description. Note the surroundings and describe any potential "targets" that could be affected in the event of tree failure. Consider the environment of the tree, including prevailing winds, microclimates, surrounding trees, and other plants. Document any history of the tree, including maintenance and management practices of the tree and its surroundings.

Risk assessment for structural failures includes three components: the potential of the tree to fail, an environment that may contribute to failure, and a potential target. Each factor has an impact on the hazard rating of the tree.

In evaluating the potential of the tree to fail, you must consider the defects, growth habits, branch attachments, lean, and the history of the tree. It is also important to consider the size of the potential failure. Obviously, the damage potential is greater for large limbs than small branches. The environment also plays a part in the potential for tree failure. Surrounding trees, location, prevailing winds, snow and ice loading, lightning, irrigation, and other management practices all should be taken into account.

By definition, if there is no potential target to be damaged, a tree cannot pose a hazard. Targets may include structures or people. Structures are relatively easy to assess because they are stationary. However, in determining the likelihood of a failed tree or branch striking a person, you must consider the immediate environment, traffic patterns, and use. A hazardous tree on a playground is of much higher concern than one along a relatively obscure boundary. Yet even in remote locations, there is some potential for a human target.

A number of ratings systems have been established for evaluating the hazard potential of trees. Matheny and Clark established one of the best known in *A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas*. This system uses a numeric formula to quantify the risk of each tree. (The book includes a sample, standardized form for risk assessment.) The Matheny and Clark system, or other ratings systems, can be integrated into a risk management program by prioritizing

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LEGAL ISSUES FOR ARBORISTS

By Sharon Lilly

Lawsuits and their avoidance have become a part of our every thought process. Now, more than ever, it is essential for arborists to have some basic understanding of the law, especially as it pertains to liability and trees. It is important to know the statutes that apply in your state or province, the safety and pesticide regulations, the legal precedents for major court cases that have involved trees, and the potential liability that arises from poor or no management decisions. Few tree care companies can afford the luxury of having an attorney on staff or even on retainer. Thus, having a basic understanding of legal issues becomes paramount.

Civil law: contracts and torts

The area of law that probably has the greatest significance to arborists is civil law. Civil law is the set of rules that regulates relationships among people. Two of the most common areas of civil law are contracts and torts.

A contract is a voluntary and binding agreement between two parties. The courts will enforce a contract if it is consistent with public law. The goal of the courts is to protect the expectations of the parties. If the court rules that a contract has been breached, the remedy sought is to place the plaintiff in the position he would have occupied had the contract been performed. Most arborists enter into contracts on a regular basis. Contracts are formed with subcontractors, suppliers, and customers. Contracts do not have to be in writing to be binding, but without a written contract the terms may be in dispute if a problem arises.

Sometimes damages result from a breach of contract. For the courts to award compensatory (monetary) damages, the

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the trees by their hazard potential, exposure and need for attention.

MITIGATION OPTIONS

Part of risk assessment is evaluating the hazards and making recommendations for abatement. Some trees will pose an unacceptable risk of overall failure and will need to be removed. On a property with many mature trees, though, even the immediacy of removal may have to be prioritized. If a tree has been condemned due to structural hazards, no competent manager will want to delay its removal—the liability risk is too great. On the other hand, if dozens of trees have been slated for immediate removal, you have to proceed first with those that received the greatest hazard rating.

Sometimes management options short of tree removal can abate the hazards. Dead or broken branches can be removed from a tree's crown. Pruning can reduce over-extended branch end weight, decreasing the likelihood of failure. If a tree has a split or codominant stems, removal of one side may be an option. Or, it may be advisable to install cables or braces to support weak branches, perhaps in conjunction with pruning. Such branches and any hardware installations should be checked regularly because the support system cannot ensure safety.

An option for trees of lower risk is continued monitoring. With good management practices such as proper irrigation, fertilization, aeration, and mulching, a tree may respond favorably and improve in condition. An example would be good callus and wood production following wounding. Trees that have been pruned, or had cables and/or braces installed, should also be monitored and reassessed at some point.

Risk evaluation cannot be a one-time occurrence. Trees should be put on an evaluation cycle that takes into account their size, age, overall condition, and management practices. The frequency of evaluation depends on budget and the level of risk that is acceptable. ■

For more information about *A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas* mentioned in this article or a number of other International Society of Arboriculture books, brochures, and videos, call ISA at (217) 355-9411 for a free catalog.

damages must have been reasonably foreseeable at the time the contract was entered. However, the victim is expected to take all reasonable measures to minimize the damages. This is called mitigation of damages.

Many of the cases that have involved trees in lawsuits have arisen out of the area of law known as torts. A tort is an act other than a breach of contract that causes "injury" for which the law recognizes a right to relief. Examples of intentional torts include assault, battery, false imprisonment, slander, and libel. If a court case is brought to trial, the function of the court is to compensate the victim such that he is returned to his pre-injury condition or to make him "whole." This, of course, is not always realistic because monetary compensation cannot actually restore a person to his original status. Also, because tort cases are often tried by jury, the rulings can be inconsistent, ambiguous, and without clarification of the decision.

Liability and negligence

When a person has suffered injury or damages, the first legal step is to place liability. Often liability is based on negligence. Negligence is the failure to exercise due care. Negligence occurs when somebody fails to perform a duty or obligation recognized by law for the protection of others against unreasonable risks. An example of negligence might be if a tree trimmer cuts branches from a tree, injuring a pedestrian below. In this situation the tree trimmer would be found negligent because he did not take proper precautions to protect individuals or keep them out of the vicinity. The employer will also be liable.

An action of negligence involves four essential elements in order for an individual to recover damages. The first requirement is the existence of a duty owed by the defendant to the plaintiff; second, the defendant fails to discharge that duty; third, "injury" results; and fourth, the injury is proximately caused by the failure to discharge the duty of care. In short, the courts must determine whether the defendant acted as a reasonably prudent person under a given set of circumstances.

Liability is based on cause. Causation in fact means that the injury can be traced back to the defendant's action (or lack of it). For proximate cause, the injury has to be reasonably foreseeable. Thus, a person cannot be held liable for unforeseen circumstances.

Acts of God

Individuals or parties are generally not held liable for injuries resulting from events that are determined to be "Acts of God." There are many legal precedents for landowners using the Act of God defense in cases in which trees have fallen or broken and caused damage or personal injuries. Many times this defense has not been accepted. The reason lies in the definition of an "Act of God." The courts have defined it a number of ways, but the principle remains the same. An Act of God is an occurrence due to natural causes that could not have been prevented by ordinary skill and foresight. Thus, individuals will not escape liability for damages resulting from a fallen tree or branch if the defect that caused the failure was known of or should have been known to exist. If a tree fails and causes injury, the Act of God defense will not be applicable if it can be shown that the tree was structurally unsound or otherwise defective, and should have been remedied or removed.

This article is not legal advice but is a survey of information stemming from many tree-related cases. Seek tree-literate legal advice to help set management risk levels and to prioritize management activities versus risks. And, of course, obtain legal advice if an accident occurs. ■