

Trees & the Law

BY JULIAN DUNSTER



Risk Assessment Concepts

Unless risk assessors have access to unlimited budget and time (and who does?), they have to use their knowledge of trees and their location to arrive at logical decisions

Before beginning a job, a tree risk assessor has to make several important decisions such as: which trees to assess, when, with what level of detail, and how often. Some of these factors are driven by budgets, which influence the amount of time and money available to undertake assessments. Others rely on the discretion of the assessor. In order to undertake a reasonable assessment, the assessor should consider the following.

Which trees to assess?

The trees to be assessed first occupy areas where the potential target gets a high rating. Busy streets, valuable property, and areas where there are always lots of people, are usually rated as high target areas. At the other end of that spectrum, rural roads, property of very low value, and

areas infrequently used by people rate a low target rating. In between these is the moderate target rating. There are no hard and fast rules to define those target ratings.

In municipal areas, it is common to see roads and people use areas rated by how many people might be there.¹ Valuable property might include hospitals, municipal infrastructure, and key power lines. On private land, target rating is also assigned ratings by use and value. For example, golf courses would typically rate the car park, clubhouse, tees, and greens (people occupy the space for relatively long periods of time) higher than fairways (people pass by any one point relatively fast).

As long as the approach used is explicit and understood, it should be reasonable from a legal viewpoint. Crucially, it is impor-

tant to understand that it may not be feasible to assess every tree in every zone, all the time.

When should the trees be assessed?

Without foliage, it is much easier to assess the structure of deciduous trees, since the scaffold limbs, branches and attachments can be clearly seen. With foliage, these aspects may be much harder to see from the ground, but the overall health and vigour of the tree can be seen. Aspects such as crown dieback, foliage colour, and amount of new growth, can be seen and interpreted. In all but special cases, it would be unusual to assess each tree in both seasons.

In high target areas, it is common to see drive by assessments undertaken right after storms to identify any extreme risk trees right away. Later on, once these extreme risk trees have been dealt with, the assessor can then revisit the most important sites and undertake a more detailed review of the remaining trees.

How much detail should the assessment include?

This is dictated by several factors. A drive by or "windshield" survey can only ever see one side of the tree, and is designed to identify really obvious, extreme risk trees; they are about to fall down and cause big problems. It is entirely possible that such trees might be missed in this level of survey. Ground surveys would typically assess trees within striking distance of the target, possibly one and a half tree heights in some cases.² That becomes a lot more time consuming. Each tree needs to be viewed at a distance, close up, and all the way round its trunk. Of course trees with massive defects, such as dead branches in the crown; or those that have fallen away and are now hung up over roads; scaffold limbs that are cracked and partly failed; or trees that have uprooted and seem likely to fall down soon, should all be obvious to a skilled and well trained assessor.

Sometimes, the really skilled assessor will see aspects of the tree that raise doubts, but require additional testing to determine if there is or is not a problem. These include probing the tree with scientific instruments to see if there is decay present; getting into the crown of the tree with a bucket



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truck, or by climbing up; locating and testing structural roots. All of these aspects require additional time and money.

How often should trees be assessed?

That depends entirely on the amount of risk that is acceptable, and the funds available. For a large city it might be impossible to look at every tree, or treed area more than once every five to ten years. Typically, the high target areas might be assessed every two to three years, and sometimes annually. The exception would be very valuable trees, usually ones that are older, larger, and potentially less able to withstand storms. These might be considered as

"retain and monitor" trees where much more frequent assessment may be justified.

Finally, the assessor and the general public need to understand that risk assessment is subjective, and involves a large amount of skill and interpretation. Some risk issues are readily identified by a layperson. Most risk issues are quite subtle and require specific assessment skills. It is impossible to achieve a Standard of Perfection where all trees never pose any risk to people or property. To expect that is to deny reality. And, reality is that the risk of being killed by a falling tree is very, very low compared to the many other risks humanity faces.

¹ This is fraught with difficulty and becomes a very subjective designation.

² Within striking distance is a reasonable minimum. There are cases where trees set back from the edge of a road have failed and killed people passing by.

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