

Guidance Note 6: Tree risk management





3.6 Guidance Note 6: Tree Risk Management

1 Introduction

1.1 Purpose of this guide

This guide outlines how Huntingdonshire District Council manages the potential risks associated with trees.

The guide concentrates on the risk associated with someone being killed or seriously injured by whole or partial failure of a tree. Other risks associated with trees, such as damage to property and minor nuisance, are dealt with in detail in Guidance note 2, Guidance for Tree Management.

1.2 Trees and risk

The risk of being killed by a falling tree is extremely low:

“Each year between 5 and 6 people in the UK are killed when trees fall on them. Thus the risk of being struck and killed by a tree falling is extremely low – the risk of being struck and killed by a tree growing in a public space is even lower. Up to 3 people are killed each year by trees in public spaces, but as almost the entire population of the UK is exposed, the risk is about one in 20 million.”*
(HSE, 2007)

The average risk is with the ‘broadly acceptable’ region of the risk triangle published by HSE’s “Reducing Risks Protecting People”. However this is only a general guide and not necessarily a statement of what is reasonably practicable in law.

Although the actual risk is low it is not generally perceived in this way by the public, due to the attention that any such incident inevitably attracts. It is important that an appropriate balance is reached which minimises risk whilst ensuring that large trees are not lost from the landscape.

2 Current status

2.1 General approach

Whenever a tree is inspected by the Council’s Arboricultural Team Leader or Arboricultural Officer, consideration is always given to the potential hazard that the tree poses and appropriate action taken when a significant risk is identified. Tree inspections are generated in a variety of ways; the majority of inspections are reactive and in response to a request or enquiry usually from the public.

2.2 Scheduled surveys – Huntingdonshire District Council land

Pro-active inspections of trees are undertaken in wooded areas of land managed by the Council’s Countryside Services.

Detailed inspection of trees in major parks will commence to identify both any work required and trees to be monitored due to their condition or location. Although a comprehensive re-inspection of individual trees will depend on the level of risk associated with them, an annual walk over survey of the major parks will be undertaken to identify any hazards and undertake tree works necessary for safety. The intention is to extend this survey to include all areas of land owned by the Council and prioritise a proactive re-inspection regime according to the level of risk.



2.3 Private trees

When trees in private ownership which pose a risk to public land are brought to the attention of the Council, the owner of the trees will be advised of the hazard and asked to take action. In cases where the owner of the tree fails to take action the Council, where appropriate, uses its powers under The Local Government (Miscellaneous Provisions) Act 1976, to ensure that the tree is made safe. If the tree is a threat to a public highway the matter is reported to Cambridgeshire County Council who use their powers under the Highways Act, 1980.

2.4 Recording tree related risk

When a tree that poses a significant risk is identified, the appropriate work to make the tree safe, or the felling/removal of the tree will be undertaken, as necessary. However, in some cases, an identified risk may not be sufficiently severe to warrant immediate action, and the tree may instead require ongoing monitoring; such as a reassessment in the summer to assess the physiological condition of the tree. In such cases, where the tree is outside an area within a proactive inspection regime, the monitoring will be recorded separately on a register of ongoing tree risk assessments.

3 Method of risk assessment

There are various tools which exist to assess the risk associated with trees, including:

3.1 Quantified Tree Risk Assessment (QTRA)

When a detailed risk assessment of a tree or group of trees is required, the Quantified Tree Risk Assessment (QTRA) system will be used. This is a system which applies established and accepted risk management principles to tree safety management. QTRA is a commonly used system in the arboricultural industry and the most commonly used tree risk assessment system for local authorities. QTRA compares the risks associated with the retention of trees with a broadly acceptable level of risk.

The assessment of tree risk is made up of the following three components:

1) Target

The target is anything of value that could be harmed in the event of tree failure. This is assessed on the frequency of occupation within the area. Therefore an area which is highly frequented such as a busy road will have a higher value than an area with a low frequency occupation such as a tree in a wood not adjacent to a public path.

2) Impact potential

The potential for the tree (or part of a tree) that is being assessed to do harm. For example a small branch is unlikely to cause significant damage, whereas if a large limb were to fail it could cause serious injury or significant damage to a structure.

3) Probability of failure

This is an assessment of the likelihood of a part of the tree or the whole tree failing.

Using the QTRA system an assessment of the level of risk posed can be given expressed as a probability of harm in any one year e.g. 1:100,000.



3.2 Acceptable level of Risk

Once the level of risk has been established it is necessary to decide whether this level of risk is acceptable. The legal framework does not require the elimination of risk altogether, but that the risk is minimised to an acceptable level. Several publications have suggested that this level is 1/10,000 per year, notably the Health and Safety Executive (1996):

“For members of the public who have a risk imposed on them ‘in the wider interest’ HSE would set this limit at 1/10,000 per annum”

On the basis of this, the acceptable level of risk has been set at 1:10,000. It may be possible to reduce the risk associated with a tree by pruning or moving the target e.g. re-routing a footpath.

There may be exceptional occasions when a higher risk may be acceptable, such as the presence of a tree of particular additional value, or for reasons of heritage associations. In these circumstances the general advice of the HSE will be followed:

Occasionally a duty holder will decide, usually for heritage reasons, to maintain a particular tree, despite the fact that it is very old or has serious structural faults that cannot be remedied. A specific assessment for that tree and specific management measures, including regular and detailed inspections are likely to be appropriate. (HSE 2007)

In addition to this, further arboricultural advice or investigations in to the condition of the tree may be sought from an independent consultant, to verify the opinion of the Arboricultural Officer or the Arboricultural Team Leader.

3.3 Types of risk assessment inspection

At present four levels of inspection are used to identify the level of risk associated with trees dependent on the circumstances. Not all trees require individual assessment by the Arboricultural Team Leader or Arboricultural Officer. There are options for the types of inspection required and the degree of competency of the person undertaking the inspection. The HSE (2007) considers that someone to be competent requires a working knowledge of trees and their defects, but need not be an arboricultural specialist.

Non-specialist survey

Members of the Operations team, Countryside Services team, and Planning (Tree and Landscape) team all undertake surveys of land under Council control and as a result should bring trees in need of more detailed inspection to the attention of the Arboricultural Team Leader or Arboricultural Officer. It is acknowledged that the role of these officers could be enhanced with additional training, to raise awareness of potentially hazardous trees.

Drive-by survey

Principally used for roadside trees to identify roads which have trees associated with them and a general level of risk, from which the most obvious hazard trees will easily be identified. Where roads with mature trees are identified, a walk over survey to identify the trees will be required, and, in the case of some trees, detailed inspection.



Walk over survey

During such a survey, only those trees with defects are noted and recorded. Particular attention is given to trees in high risk areas, e.g. by high occupancy areas, roads and buildings. If a defect in a tree is noted a detailed assessment will be made.

Detailed inspection

Comprising a comprehensive inspection and QTRA of the tree in question, with all relevant details recorded and specific management recommendations made. This type of inspection will only be undertaken by the Arboricultural Team Leader or Arboricultural Officer or other suitability qualified person.

4 Summary

- The system is currently under review
- The risk associated with trees is generally relatively low
- The identification of risk associated with trees is always considered when a tree is inspected
- A strategy of pro-actively surveying trees in high use areas has commenced and is being expanded to cover more areas
- The Quantified Risk assessment (QTRA) method of establishing the degree of risk is used.

5 More information

Quantified Tree Risk Assessment

<http://www.qtra.co.uk/>