

Tree safety management

Tree management is a major part of the work of VSCG members. For example, the Forestry Commission manages around 850,000 hectares of woodland, and it is estimated that there are about 6 million trees on the National Trust's 250,000 hectares of land.



This guidance aims to provide a summary of the key elements that would form part of an organisation's strategy for tree safety management. For more detailed guidance on specific points, you may need to consult the references listed at the end.

Trees are highly valued for their individual beauty, as an intrinsic and key element of the natural and historic landscape and for the wildlife they support. Decaying trees create valuable habitats.



We are committed to managing safety in ways that do not compromise conservation, heritage, recreation and landscape objectives, whilst encouraging public access. It is essential that risks from trees be considered in the context of these [guiding principles](#).

What is the risk?

On average, each year 5 or 6 people in the UK are killed by trees. So the risk of being struck and killed by a falling tree or branch, or by driving into one, is extremely low.

The risk from a tree falling in a public space is even lower. Up to 3 people on average 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. The risk, per tree, of causing fatality is of the order of one in 150 million for all trees in Britain or one in 10 million for those trees in, or adjacent to areas of high public use. (Source: Health and Safety Executive [HSE].)

The average risk is firmly in the “broadly acceptable” region of the tolerability of risk triangle published in HSE’s Reducing Risks, Protecting People. (You can read the HSE document by clicking this link: [RRPP.pdf](#))

However, the public may not perceive this low level of overall risk, particularly following an incident. Media coverage is often disproportionately extensive because of the comparative rarity of deaths involving trees. Also, the term “broadly acceptable” is a general guide and not a definitive statement of what is reasonably practicable in law.

Your responsibilities

You have a duty to do all that is reasonably practicable to ensure that people are not exposed to risk. This duty is established in criminal law under the Health and Safety at Work Act, and in civil law under the Occupiers’ Liability Acts.

The Health and Safety Executive has published advice to their inspectors and local authority enforcement officers as to the expected standards for management of the risk from falling trees. You can read it by clicking this link: [HSESIM.pdf](#). VSCG members were consulted about the content of this advice.

The VSCG also consulted the HSE during the course of writing the guidance given here.

We give detailed examples of how three organisations carry out tree safety management. These are the [Royal Society for the Protection of Birds](#), [Forest Enterprise](#) and the [Royal Parks](#). (You can also download the documents using the links at the bottom of this page.)

All these organisations own sizeable areas of land and manage a large number of trees. In many cases, the great acreage of woodland makes it impracticable to carry out detailed inspections of individual trees. The examples given here show how the organisations focus their resources on areas of high visitor usage and trees that pose more significant levels of risk.



Please note that these written documents do not stand alone. Procedures for tree safety management are often set within the context of a policy for conservation and management of forest, woodland and trees, and within a wider framework of visitor safety management. All these organisations have arrangements for staff training that set their procedures for tree safety

management within the wider context. Also, the value of experience in making judgements about tree hazards and solutions cannot be underestimated.

You will need to tailor your approach to suit the nature of your own land holding and the resources that you have. Nevertheless, there are a number of common elements that you should consider.

Elements of tree safety management

- 1. Tree safety management should be part of a comprehensive visitor safety plan for your site.**
- 2. You should have clear written policy and procedures that identify who is responsible for doing what.**
- 3. You must have a system to ensure that your policy and procedures are properly applied and monitored.**
- 4. Focus resources on areas of greatest risk to people and property – zoning in accordance with different levels of public use is a common approach.**

Often it is not reasonably practicable to inspect and record every tree. To help prioritise inspections it is helpful to map areas with respect to the level of public access to trees.

You can establish zones of high, medium and low use. High use zones would typically include areas next to railways and busy roads; heavily used car parks, picnic areas, gardens and playgrounds; in fact any areas where large numbers of people congregate. Don't forget special events.



High-use zones should be inspected as your first priority. The species, health and location of trees will have a bearing on the levels of risk. This, in turn, will help determine whether any risk controls are necessary. Unless a specialist is helping with the initial inspection, you should consider whether you need help from an arboricultural specialist to diagnose problems with individual trees, advise on appropriate remedial work and work out when further inspection is necessary.

Trees in high use zones are typically inspected once a year. It might not be practical or necessary to record every individual tree. Maps of groups of trees

inspected may be helpful. However, you might need to record an individual inspection if a particular tree presents a high risk. For example, if you decide to retain a tree with structural faults in a high use zone it would need an individual record. This would include the risk control measures that you have taken, and would almost certainly include regular, ongoing monitoring.

Zones of medium use will have fewer visitors and are likely to be inspected less frequently (maybe every three or even five years).

Low use zones typically have restricted access or few visitors. They may be remote or well away from paths. These zones may have no formal inspection procedure.

You should record the rationale for the designation of usage zones, and you should have a system in place to review their status to assess whether levels of use have increased or other changes have happened to take the area into a higher or lower use category.

The examples show the different ways organisations have used zoning principles to meet their own requirements. The National Trust, for example has five categories of usage zone to facilitate more precise targeting of resources. For the Royal Parks, it is possible that the smaller, heavily used central London parks such as St James's and Green Park would be designated high use in their entirety.

One of our case studies also gives an example of how the RSPB have used zoning when managing trees at [Challon Hall Wood](#).

5. Skills and knowledge are necessary for Zone Assignment and Risk Assessment.

You need someone who has a full understanding of your site and visitor characteristics and behaviour. You also need someone (not necessarily the same person) who is competent to assess the trees and their defects. The site manager should be able to establish the use zone, but it is likely that someone with specialist knowledge of trees will be needed to identify and evaluate defects and help assess the level of risk.

The level of risk is based on patterns of visitor activity and the nature and location of the trees. Inspections should consider the magnitude of the hazard and assess the likelihood of tree failure. Factors to consider include:

- size of tree (small trees are usually less likely to fail and are a lesser hazard)
- species
- type, position and severity of any defects
- nature of location (exposure to wind, depth of soil etc.)

6. You must have a system that encourages staff to report defects in trees, possible damage, accidents and near misses.

Causes might include the aftermath of severe weather, vehicle impact, and work in the vicinity, such as service utilities digging trenches.

7. You must have a procedure to act on such reports, including recording future inspections and/or remedial actions.

The nature of the response will be related to the use zone. Trees with serious defects in high use zones are almost certain to create a high level of risk and need urgent action.

8. You should have a system in place to call upon specialist arboricultural skills when necessary.

The Arboricultural Association publishes a [list of registered consultants](#).

9. You must keep records of your risk assessments and tree inspections.

You must have a system for periodic, proactive checks, keeping a short record of when an area, zone, or occasionally an individual tree has been inspected.

These should include details of any defects found and actions taken. Records should be retained for at least seven years.

10. Where necessary, introduce risk control measures.

Hazardous trees in high use zones demand urgent attention as a priority. When considering ways to reduce the risk, take account of the need to:

- retain important trees in the landscape
- conserve habitats, including those provided by old and decaying trees
- promote public access

Possible risk control measures include:

- Frequent monitoring of important trees in high use areas that show signs of possible failure.
- Preventing or reducing public exposure to the hazard. This could be by closures, path diversions, information or signage. Consider relocating car parks, playgrounds or picnic areas. Temporary closures may be appropriate where practicable in gale force winds.
- Eliminating the hazard by pruning or felling.

Remember to keep a record of your actions.

11. Look at trees on neighbouring land that could impact on visitors to your site.

Keep a record of the actions you have taken to notify adjacent landowners of your concern and the actions you have taken to protect visitors on your land.

12. You must have a system encouraging staff to report defects in trees, accidents and near misses or other concerns. You must have a procedure to act on such reports.

Training Courses

VSCG members run in-house courses for their own staff. Basic training, typically for a day, is designed to enable participants to carry out basic tree surveys. Staff must be aware of their limitations and know when and how to get further advice. Course elements include:

- designating usage/risk zones
- frequency and level of inspections
- recognition of hazardous trees
- risk control – evaluation of options and planning actions
- knowing when and how to get further advice
- record keeping
- wildlife and habitat considerations

You will also need staff who are competent and trained in procedures for:

- emergencies and accidents
- managing the site in the event of forecast high winds
- engaging tree contractors

The training should include practical exercises outside, to ensure that the theory is understood and can be competently applied.

The Arboricultural Association runs [training courses](#) accredited by Lantra. (Lantra is an employment-led organisation, licensed by the government to represent the skills, business development and training needs of the environmental and land-based industries.)

There is a one-day basic tree survey and inspection course for non-arboriculturists, such as park rangers; and a three-day training programme, with exam-based assessment, designed for more experienced professionals.

Tree surgeons and contractors

The Arboricultural Association maintains a [list of contractors](#) who have been examined for safe working practices and technical competence consistent with British Standard 3998: Recommendations for Tree Work, 1989.

The work undertaken includes advice on maintenance requirements, planting, tree pruning, cable bracing, pest and disease control and the felling of trees in difficult positions.

Links to further information

Veteran Trees. A Guide to Risk and Responsibility, English Nature:
[EnglishNatureVetTreesRiskGuide.pdf](#)

Towards Reasonable Tree Risk Decision-Making. Neville Fay: [NFayPaper.pdf](#)

There are additional downloadable files associated with this article

- [ForestEnterprise_TreeSafetyManagement_1.pdf \(1.38MB\)](#)
- [RoyalParks_TreeManagement_1.doc \(67.5KB\)](#)
- [RSPB_TreeSafetyManagement_1.doc \(69.5KB\)](#)

Web sites of interest

[Arboricultural Association](#)

[Lantra](#)

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