



Liability, negligence and Acts of God; the emerging position on managing tree hazards in England

Adapted from a paper published in the Autumn 2011 Arboricultural Journal BTC/58/2011







Jeremy Barrell is a tree consultant based in the UK (www.barrelltreecare.co.uk) specializing as an expert witness in personal injury civil court actions where trees have been implicated in harm. During the last ten years, he has been involved in a range of cases, including most recently, Poll v Bartholomew, Atkins v Scott and Micklewright v Surrey County Council. His presentation will examine how the English courts seem to be viewing harm from the structural failure of trees and the emerging position for duty holders attempting to identify the standard of their duty of care. A practical view of the evolving duty of care landscape will be offered. with a proposed decision-making framework that may assist those with responsibility for managing

trees. It seems likely that uncertainty will remain over one of the most challenging issues for duty holders, i.e. how much tree management is enough to discharge their duty of care? However, reviewing the way that the courts have approached harm caused by tree failures in recent years provides an opportunity for duty holders to become more focused in their decision-making.

The duty holder has a central role to play in this process and yet the emerging guidance around the world seems more focused on the practicalities of tree inspection rather than the broader management of tree risk. In contrast to that trend, this paper approaches the management of tree hazard from a duty holder's perspective. It explores the emerging framework for decision-making in the context of the most frequently referenced technical publications and recent court judgments. An important objective of this paper is to set out practical guidance for duty holders and their advisors wishing to identify the likely standard of their duty of care, and how it might be assessed should a tree failure incident end up in court.

THE DUTY OF CARE LANDSCAPE

The concept of a duty of care landscape

In practical terms, the actual requirement of what duty holders have to do to meet their duty of care is elusive detail, with no definitive answer until a case gets to court. It is an understandable aspiration for duty holders to want the security of knowing they have done as much as can be reasonably expected, but there is no clear route from the 'start' to that position of 'safety' (Figure 1). Instead, there are multiple issues that have to be understood and weighted, which in turn inform the multitude of available management options, with no guarantee of protection if an accident occurs! The issues are complex and can be likened to obstacles in the landscape that duty holders have to negotiate in their journey to the security of a robustly defensible



position if it all goes wrong. There are different routes across this landscape ranging from doing nothing to removing all the trees, but where does the balance lie? The extremes are obvious, each with its set of risks and benefits, but a sustainable, proportionate, sensible and defensible path is much more difficult to map. One way of trying to unravel this conundrum is to consider the detail of each individual issue within a wider strategic framework (landscape), which is the thrust of this paper. Figure 1 visualizes this conceptual landscape and the duty holders' task is to negotiate it successfully from 'Go' to 'Home'.

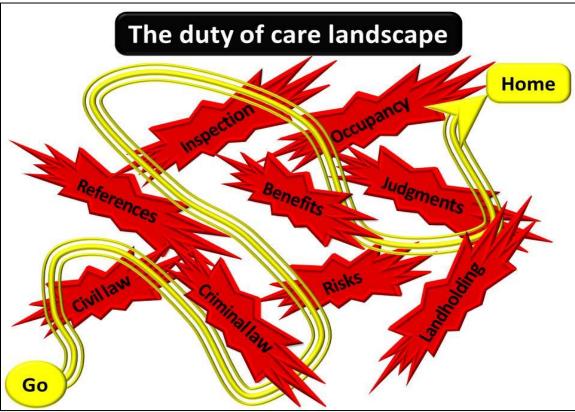


Figure 1: Conceptually, duty holders have to journey across a vague and frequently changing landscape of obstacles and conundrums in their quest for the capacity to confidently refute allegations of negligence if harm arises from a tree failure.

International perspective

Although this analysis has a UK perspective, most of the principles are similar around the world and there are likely to be some international parallels that can be drawn from it. Throughout the urbanized world, society expects that the risk of harm to people and property is kept as low as practically possible and trees are no exception to this general rule. Where harm arises from tree failures, there are likely to be probing questions about how those trees were managed, with a view to identifying if anyone was to blame, i.e. were they negligent, or whether it was an unpredictable accident, i.e. an Act of God. Where disputes cannot be settled by the parties, these issues will



ultimately be decided in the courts and those judgments can serve as valuable feedback to people responsible for trees (the duty holders) on what their legal duty is. However, very few cases ever get to court and so reliable references to assist in this process are scarce. In the absence of any detailed guidance, duty holders have to make a 'best-guess' on how much management is enough to allow them to successfully refute allegations of negligence in the event of harm arising from one of their trees failing.

Balancing tree benefits against tree risks

Although trees can potentially pose risks to people and property, their presence also provides considerable benefits to the immediate surroundings and the wider environment. Indeed, there is an increasing body of evidence indicating that trees may be much more valuable than commonly appreciated. Emerging research shows that trees can make our communities more resilient to the impacts of climate change, with the potential to reduce urban temperature extremes and buffer surges in rainwater runoff, creating safer and more comfortable living conditions (GILL *et al*, 2007). Furthermore, trees absorb pollution, enhance ecological diversity and have a significant beneficial impact on human physical and psychological wellbeing. There is increasing evidence that people who live near trees are likely to be healthier and happier. A recent Natural England (NE) analysis of the NHS *Walking the Way to Health Initiative* showed that, for every £1 spent on access to green space, there was more than £7 of benefit in terms of averted health costs (NE, 2009). This and other similar investigations seem to be confirming that trees offer multiple benefits to our communities, with the potential to deliver significant rates of return on investment.

Figure 2 illustrates three broad categories of benefits, based on how far beyond the location of the tree they can be enjoyed. Adjacent to the tree, benefits such as shelter, cooling and ultra-violet light reduction flow almost entirely to the owner, with very little diffusion into the wider environment. However, some benefits filter out into the local community, with ecological enhancement, visual amenity, health improvements and pollution buffering being obvious examples. In a global context, it is now widely accepted that most trees contribute positively to sustainability through climate change mitigation and enhancing the biodiversity resource. Clearly, the enjoyment of tree benefits extends well beyond the location of the tree and yet, invariably, the burden for the maintenance costs and legal responsibility lies solely with the tree owner (FAY, 2010).



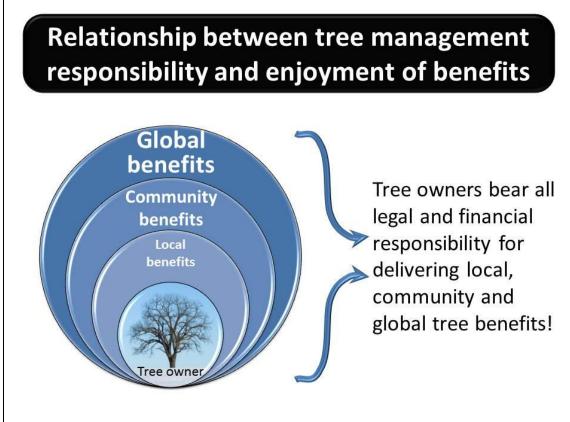


Figure 2: The presence of trees provides benefits at the local, community and global level, but the tree owner has to bear the full burden of tree management costs and legal liability

In practice, tree owners are the guardians of a local resource of international importance, with no formal support from the wider beneficiaries. The ownership of trees carries an often well-voiced expectation from society for safe management, but with no clarity on how to factor their multiple and wide-ranging benefits into the equation. Without detailed guidance on balancing risks against benefits, the challenge for tree owners is to manage their trees in a way that the courts will support, but without moving too far in the direction of the safest option, i.e. wholesale tree removal.

Duty of care in the context of size of landholding and available resources

In broad terms, a duty holder can have a duty of care in both civil and criminal law to undertake sufficient management to avoid reasonably foreseeable injury or harm (Stead, 2008). Duty holders are expected to consider the risks posed by their trees and manage those risks in a reasonable and proportionate way. There is established case law (GOLDMAN V HARGRAVE, 1967) upholding the principle that the standard of the duty of care varies according to the resources available to the duty holder, i.e. large land owners and managers such as country estates or highway authorities would be



expected to apply a higher standard of management than smaller land owners such as residential householders (Figure 3). In short, the law expects duty holders to act in a practical and sensible way, according to the overall size of their land holding and the availability of resources.

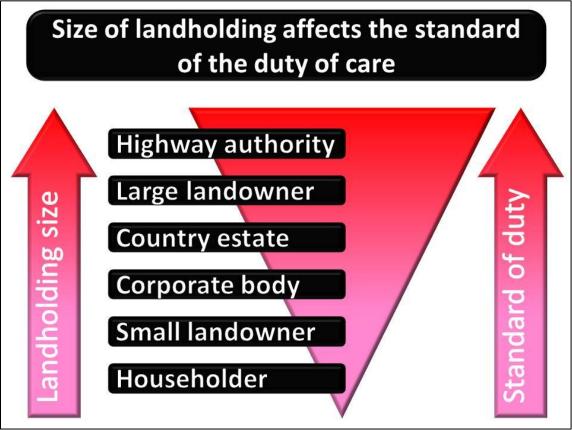


Figure 3: Established case law reflects the principle of proportionality in that the standard of the duty of care increases with the size of landholding and the resources available to the duty holder

Negligence, liability and Acts of God

In the event that duty holders are found negligent in meeting their duty of care in terms of checking, i.e. they did not have their trees checked where a significant hazard potential existed, it does not automatically follow that they would be liable for any harm that arises. Liability will only flow from that negligence if it can be established that a competent check within a reasonable time-frame of the incident would have identified an unacceptable risk of harm and resulted in remedial works that would have prevented that harm occurring. If a defect that resulted in failure would not have been found during a competent check then, irrespective of any negligence from not carrying out a check, a duty holder is unlikely to be held liable for the consequences of the failure. This is a common scenario and often results in court examinations focusing



on the competence of inspectors and whether causes of harm could and should have been discovered before the event.

More specifically, negligence, liability and Acts of God are commonly used terms when discussing duty of care and how blame might be apportioned in the event of harm arising. Although they are the subject of detailed legal definitions, for the purposes of this paper, their everyday meaning during normal use is more helpful:

- **Negligence** occurs when someone fails to do something that a reasonable person would have done.
- Liability is where the responsibility lies when something happens, i.e. who is to blame, with an implication that this is where compensation may be due for any harm that arises.
- An **Act of God** is an event that is caused exclusively by the forces of nature without any human intervention, with the very important characteristic that there is no obvious indication of the event before it happens.

In this very general context, Figure 4 illustrates a simplistic decision-making framework for assessing if a duty holder might be held responsible for the consequences of a tree failure.

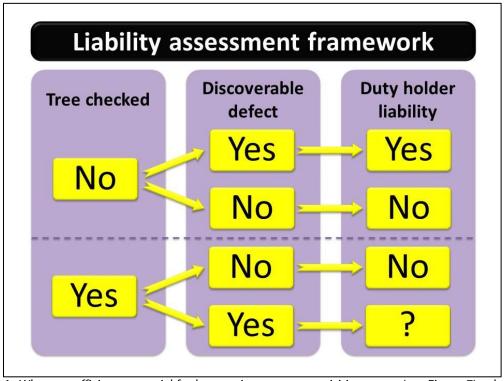


Figure 4: Where a sufficient potential for harm exists to warrant visiting a tree (see Figure 7), whether a check occurred and whether there was a discoverable defect are essential considerations in the decision-making framework when assessing liability



Each vertical panel in Figure 4 illustrates a stage in the decision-making process. The horizontal elements linked by arrows illustrate how liability is likely to flow, considering the variables of whether the tree was checked and whether there was a discoverable defect. Following the top horizontal thread, it is a common misconception that if a tree is not checked and harm arises, then the duty holder could be held negligent and, if so, then liability automatically applies. However, this is not necessarily the case for two reasons:

- 1. **No need to check:** As explained in Figure 7 below, if there is a very low level of access close to a tree, which means there is an insignificant potential for harm, it is likely that there will be no obligation to check the tree and so liability is unlikely to follow in such circumstances.
- 2. No discoverable defect: If a defect that resulted in failure was not discoverable during a visual check, then any harm could not have been reasonably predicted, and again, liability is unlikely to attach to the duty holder. In other words, the event was an Act of God (assuming that it was not related to any human intervention, in the strictest meaning of the phrase).

If there was no check, there was a significant potential for harm and there was a discoverable defect, it is likely that the duty holder would be found negligent and liability would follow.

In the lower horizontal thread, if a tree was checked but there was no discoverable defect, then it is unlikely that the duty holder would be found liable for any harm. However, if there was a discoverable defect that was not identified during a check and harm arose, then where liability lies is not so clear. If the duty holder was not advised of the defect by the inspector, i.e. the inspector missed it, then liability could possibly lie with the inspector for not doing the job properly. Of course, this would only follow if the duty holder employed a third party inspector. If the duty holder was also the inspector, then the issue of their competence would probably arise, which may be explored in more depth by the court.

Published guidance and technical references

The courts do not consider complex matters in isolation and usually look towards published guidance and technical references, typically interpreted with the help of experts, to inform the process of assigning liability. In principle, any relevant publication could be referenced in court proceedings but, in practice, the following core documents seem to be used most often in the UK:

• Matheny & Clark (1994): A photographic guide to the evaluation of hazard trees in urban areas (2nd Edition) was the first widely used reference to formalise the concept that the hazard from trees could be rated by considering a combination of



the potential for failure, the size of the part that could fail and the targets that could be harmed.

- Mattheck & Breloer (1994): Forestry Commission Research for Amenity Trees No 4 *The body language of trees* is an internationally recognised primary text on tree inspection and assessment and specifically the technique of visual tree assessment.
- Lonsdale (1999): Forestry Commission Research for Amenity Trees No 7 *Principles* of *Tree Hazard Assessment and Management* is one of the primary texts on tree hazards and their management.
- Lonsdale (2000): Forestry Commission Practice Guide *Hazards from Trees: A General Guide* focuses on woodlands, but is a useful general reference for wider tree management situations.
- **Highways (2005):** Department for Transport *Well-maintained Highways Code of Practice for Highway Maintenance Management.* This National Code sets out government endorsed guidance on best practice for highway maintenance.
- HSE (2007): Health & Safety Executive Sector Information Minute *Management of the risk from falling trees.* This document is aimed at HSE enforcement officers for criminal prosecutions under the 1974 Health & Safety at Work Act, but there is evidence from *Poll v Bartholomew* and *Atkins v Scott* that it is also referenced in civil cases. Although it is likely that its content will be considered relevant, the weight it will be given is obviously a matter of discretion for the courts.

Although the courts are not bound to accept any technical information or expert interpretation, it is very likely that relevant references, both internationally recognised and of local origin, will be produced in evidence, since they can provide a valuable insight into the benchmarks against which duty holders may be assessed.

Recent English court cases

When a tree fails and causes harm, court deliberations often focus around the adequacy of the inspection regime, i.e. whether an inspection was necessary, the nature of the inspection, the frequency of inspection and the competence of the inspector. There are no simple answers to all these questions, but it is clear that a formulaic approach does not work. This is because of the range of variables and the subjective nature of the judgments. In practice, the final decisions are made through the subjective interpretation of the evidence before a judge, in the context of relevant case law.

Duty holders have a responsibility to identify what practical tree management measures they should take to meet their duty of care. In that context, recent court cases provide an insight into how modern interpretations are likely to be applied, and where the boundaries between reasonable and unreasonable management lie. Since



2006, there have been five judgments from the lower English courts that provide some limited pointers on how these matters may be viewed:

- *Poll v Bartholomew* (2006): This High Court case addressed the standard of duty of care and decided that, in this set of circumstances, a drive-by inspection was not a sufficient level of inspection and the Claimant succeeded (Figure 5). During the evidence, both tree experts jointly developed a broad definition for inspector competence to assist the court, but this was agreed between them and not explored in depth during the case.
- *Corker v Wilson* (2006): This City of London Court case considered the failure of a branch that had a crack on its upper side and whether the householder owner could have been expected to see it. The householder inspected the tree from time to time and it was held that there were no obvious defects to be seen, which resulted in the Claimant failing (Figure 6).
- Atkins v Scott (2008): This County Court case focused on the inspection regime and the competence of inspectors. It confirmed that, although desirable, it is not essential to have a written record of inspection as long as a regime existed and that can be reliably established through testimony. It also suggests that competent inspectors do not necessarily need formal qualifications, although their ability to identify defects and know how to manage them would need to be explored through examination. Another central issue was whether a split in the failed branch would have been discoverable during a competent inspection. The court concluded that it could not have been seen and, as a result, the Defendant successfully refuted the claim (Figure 6).
- Selwyn-Smith v Gompels (2009): This County Court case is interesting because it reviews the long-standing legal principle that the standard of duty of care varies according to the size of the land holding and resources of the tree owner. It aligned with existing case law in that the lowest standard applies to residential householders and requires them to be aware of obvious defects, but this is unlikely to extend to them being familiar with detailed technical publications. It was held that there were no obvious reasons for the householder to suspect the tree was going to fail and the Claimant was unsuccessful (Figure 6).
- *Micklewright v Surrey County Council* (2010): In this County Court case, the Judge found that Surrey County Council had breached its statutory duty through failing to inspect the tree. However, it was found that, even if an inspection had taken place, the defect that caused the failure would not have been discovered and so the Claimant failed (Figure 7). This case is currently going to appeal, so there may still be more to interpret from this one.



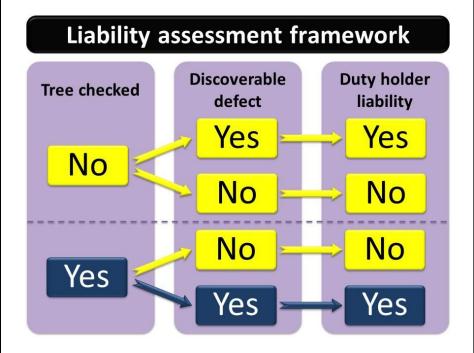


Figure 5: In Poll, the tree was checked, there was a discoverable defect that was not found and liability flowed to the duty holder (shown by the darker path)

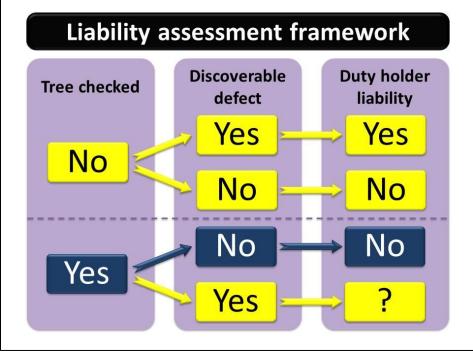


Figure 6: In Corker, Atkins and Selwyn-Smith, the tree was checked, there was no discoverable defect and there was no liability for the duty holders (shown by the darker path)



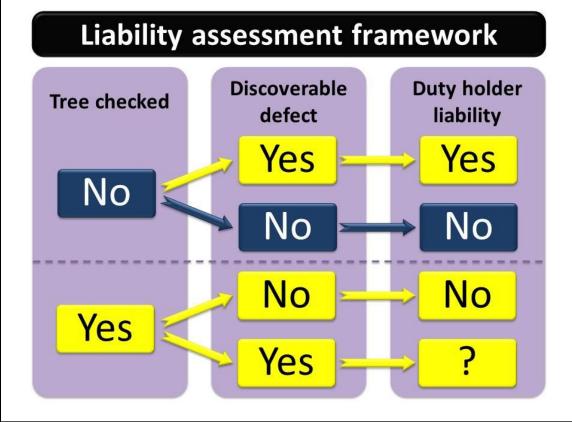


Figure 7: In Micklewright, the tree was not checked, there was no discoverable defect and there was no liability for the duty holder (shown by the darker path)

Although these five judgments have no status as recognised precedent authorities, they are of general interest for duty holders because their detail offers some practical insight into how the courts may assess future tree failures. More importantly, they begin to create a broad framework for tree management and provide some clues as to what may be expected if a case goes to court.

HOW MUCH TREE MANAGEMENT IS ENOUGH?

There is no definitive set of rules describing the detail of tree management necessary to meet a duty of care. Instead, duty holders have to make an informed 'best-guess' and trust that the courts find in their favor if harm arises from a tree failure. In turn, the courts may review recent tree related judgments, established case law, expert analysis, witness testimony and any relevant technical information to assist in deciding if a duty of care has, or has not, been met. Faced with such a diverse array of references, what practical steps can duty holders take to minimize their liability in the event of legal proceedings?



Is any proactive management necessary?

An obvious starting point is to establish if a tree needs inspecting at all, i.e. does the occupancy near the tree by people that could be injured or from structures that could be damaged warrant any proactive intervention? MATHENY & CLARK (1994) explain that the risk of harm is affected by three factors; the size of the tree part that could fail, the likelihood of that part failing and the targets that could be harmed. ELLISON (2005) usefully develops this concept, assigning each element an estimate of probability to arrive at a numerical indication of risk, noting that 'The target value is the most significant and most easily quantified element of the assessment.' This is of particular relevance to duty holders because if there are few or no targets, i.e. the lower end of the occupancy range, then no matter how big a tree is or how likely it is to fail, there will be little or no potential for harm. Furthermore, no tree expertise is required to assess occupancy, just local knowledge of the property that would normally be readily available to most landowners. It follows that a sensible first consideration for prudent landowners is to identify zones based on their knowledge of occupancy of their property. In areas of low occupancy, the potential for harm would be so low that there may be no need to check trees at all, irrespective of their size or likelihood of failure. However, where incidents result in legal action, duty holders may be called upon to explain why they considered it reasonable and proportionate not to check.

Establishing the potential for harm in the form of a location zoning exercise would not need any specialist input or require a disproportionate allocation of resources. So it seems this is a reasonable minimum requirement for all duty holders. Indeed, zoning is extremely cost-effective because it focuses resources where they are most needed and reduces the overall risk of harm by ensuring that resources are not wasted on unnecessary inspections. Figure 7 illustrates the concept that as an increasing number of people use the land around trees, the potential for harm increases. Obvious types or places of use include highways, parking, pedestrian use and visiting or occupation of buildings. If an area is not formally accessed or used, there is no realistic potential for harm and no need to check any trees at that location. As the occupancy increases, then so does the potential for harm, along with an increasing requirement to manage trees proactively. All that is required to complete this analysis is knowledge of the land and its accessibility, with no tree expertise needed at this stage.





Figure 8: The greater the occupancy near trees, the greater the potential for harm

In line with the judicial position that decisions on whether a duty of care has been met are for the court, Figure 8 purposely shows no clearly defined boundaries between the varying degrees of potential for harm. Potential for harm is a continuum, with blurred thresholds between the different levels within the extremes. At the lower end, for land with no formal access or any significant occupation, it will be obvious that no tree management would be required. Similarly, it is obvious at the other extreme, where there are high levels of access and occupation, that proactive tree management is essential. However, the level of occupation that triggers the need for more careful management is not so obvious, with no precise guidance on where the threshold lies.

In a health and safety at work context, the broad position of the HSE is 'For trees in a frequently visited zone, a system for periodic, proactive checks is appropriate.' (HSE, 2007). It goes on to clarify that 'As a rough guide, 'trees subject to frequent public access' are those that are clearly approached by many people every day.', suggesting picnic areas, schools, children's playgrounds, popular footpaths, car parks and the side of busy roads as examples. The Department for Transport (DFT) offers a similar position for highways in that 'Safety inspections should incorporate highway trees, including those outside but within falling distance of the highway.' (DFT, 2005), which clearly indicates that all trees within falling distance of public highways are likely to be



classed as being located in a '*frequently visited zone*'. These are helpful references for establishing the upper levels of occupancy, but they do not identify the transition point where the duty to manage trees proactively ceases.

Indeed, pinpointing the threshold where the level of access and occupancy triggers the need for proactive management is always going to be difficult until the courts provide some clarification. In the larger land holding community, there is understandable concern that a low threshold will create an unsustainable management burden that is both unreasonable and impractical. On the other hand, as discussed in more detail at the end of this paper, there is the legal concept of proportionality that the courts are likely to give significant weight. If a risk can be easily and cheaply addressed, then the courts may not view a very low risk as justification to take no action. In the absence of any clearly defined threshold, the precise location of the boundary between these zones becomes a matter of judgment for the duty holder in each individual situation, ultimately to be decided by a judge in the event of legal action.

Quick visual checks

From Figure 8, if a tree is in a location where there is a significant potential for harm because of occupancy, then the next stage in a responsible management regime is to visit and look at it. The purpose of that examination is to assess if there is a sufficient risk of harm to warrant more specific management intervention. The nature of an inspection can range from a quick visual check at one extreme, to a more detailed and time-consuming investigation at the other. Whether a quick visual check is sufficient and how much detail is necessary, are important considerations for duty holders.

As *Selwyn-Smith v Gompels* reminds us, established case law dictates that the standard of the duty of care relating to tree inspection will vary according to the overall size of land holding and available resources. Where the zoning exercise identifies the need for proactive management, the highest standard to be met will be for the larger landowners with commensurate resources. For such duty holders, health and safety at work legislation is likely to apply. The HSE sets out its expectations for inspecting trees in a frequently visited zone as '*This should involve a quick visual check for obvious signs that a tree is likely to be unstable …*' (HSE, 2007). This does not seem to be an onerous standard to apply and clearly reflects the principle of proportionality that permeates all HSE guidance. However, what constitutes '*obvious'* is not clarified and is left as a matter of judgment for this upper end of the land-holding spectrum.

It would be inconsistent for a higher standard than this to apply to smaller land holders, so it follows that the average householder would not be expected to exceed the HSE defined level of inspection. In *Selwyn-Smith v Gompels* and, to a more limited extent in *Corker v Wilson*, the issue of visibility of defects was explored and discussed in a householder context. Although not spelled out word-for-word in these judgments, it is likely that householders would be expected to identify obviously



visible tree conditions that could affect safety. These include leaf color, the health of the crown, and the overall appearance of the trunk and branches in terms of signs of decay. They are likely to call in an expert if they become concerned and need advice. However, it is unlikely that they would be expected to obtain or familiarize themselves with technical publications.

In summary, if the occupancy of a location requires trees to be checked, a quick visual check looking for obvious defects is all that is needed, with a more detailed inspection by an expert only necessary if that check reveals cause for concern. However, how the courts will interpret 'obvious' in the context of a householder compared to a larger land holder is not clear and the standard of the duty of care on this matter remains blurred.

Inspector competence

The HSE (2007) advises that the quick visual check should '... be carried out by a person with a working knowledge of trees and their defects, but who need not be an arboricultural specialist.' Again, this emphasis is on proportionality, with a clear recognition that the broad level of risk is so low and the number of trees involved is so great, that it would be both unnecessary and practically unworkable to advocate specialist inspection as the default position. Furthermore, Selwyn-Smith v Gompels and Corker v Wilson indicate that the courts are likely to be supportive of householders inspecting their own trees, so the use of 'specialists' to carry out the quick visual check does not seem necessary throughout the range of land holding sizes. However, for larger land holders, the HSE expectation is clearly above that of a layman, a position that is reiterated in the advice to highway authorities regarding safety inspections, 'Authorities should include some basic arboricultural guidance in training for inspectors...' (DFT, 2005). It goes on to advocate 'A separate programme of tree inspections, however, should be undertaken by arboricultural advisors.', endorsing the HSE position that 'a working knowledge of trees and their defects' is an essential ingredient of responsible management for this top end of the land holding spectrum.

In the context of larger land holdings, the issue of inspector competence was considered in detail by the experts in *Poll v Bartholomew*. However, the matter was agreed between them and not tested to any great extent during the hearing. Their analysis is useful because it considered the credentials necessary for an inspector to be deemed competent. Both experts were sensitive to how inappropriate a formulaic approach to assessing inspector competence was, despite the obvious attractions of a simple recipe that delivered an indisputable answer. Their view was that it was not feasible or realistic to devise such a method because there was no objective measure of inspector credentials that would precisely define a threshold of competence. Instead, they were mindful that, in practice, almost any combination of experience and qualifications had the potential to deliver competence, but none provided a guarantee. Faced with such a complex credential-based solution, they opted for a different approach, which focused on what a competent inspector must deliver. They



agreed that the distillation of an inspector's task was to identify tree hazards and assess the levels of risk, which would inform appropriate management recommendations to minimize the risk of harm. The essence of this reasoning was set out in the definition of a level 2 inspector as having '... sufficient training, expertise and/or qualifications to identify tree hazards, assess the levels of risk and make appropriate management recommendations.' This approach shifted the focus away from credentials and more towards the ability to do the job. This case is a reminder that the courts seem to prefer to explore these matters on a person-by-person basis, with the decision on competence being a subjective judgment rather than a formulaic derivation.

This reasoning was successfully presented in *Atkins v Scott*, where the Judge accepted that the estate workers, although lacking in formal qualifications, had sufficient experience to deliver competence. Furthermore, they proved that they could do this through their oral evidence on the witness stand under the most intense and detailed cross-examination, which was a harrowing but effective means of demonstrating that the duty of care had been met. In both these cases the courts seem to be accepting that competent inspectors do not need extensive training or have to be specialists, but they do need to know about trees and when to seek further help. Importantly, the emphasis seems to be moving away from a credential-based prescriptive approach, and is becoming more focused on the ability of the inspector to identify defects or signs of weakness.

Frequency of checking

A regular question explored in the analysis and development of tree management regimes is how frequently trees should be checked. From the approach set out in Figure 8, if there is no significant potential for harm, i.e. the trees are remote from access, then there is no automatic need to check them at all. However, as the potential for harm increases, i.e. more people get closer to the trees more often, then the need to check emerges, although there is no clearly defined threshold on precisely what level of risk triggers that duty. Indeed, this is clearly a matter for the courts, assessed on a case-by-case basis, because of the wide range of individual circumstances that can arise. However, it is possible to attempt to narrow the range by reviewing some of the more respected published guidance on the matter.

Although it may have limited application to smaller land holdings, a useful starting point can be gleaned from a review of the national guidance for highway authorities. This advises that the default interval for inspection should be at least every five years and that may be reduced on the advice of an Arboriculturist (DFT, 2005). Routine inspections are also advocated by the Forestry Commission (LONSDALE, 2000) for woodlands, with the frequency dictated by being able to detect hazards that have recently developed. LONSDALE (2000) goes on to clarify that large old trees at high-usage locations may require checking annually, or even more often in extreme cases. Although it would be inappropriate to apply this to all trees, there are clearly instances where inspection frequencies of a year or less may be necessary to discharge the duty



of care. This higher standard of inspection frequency is most likely to apply to large, mature trees that have identified defects and are located in areas of high usage.

These references provide a broad insight into the issues it would be prudent for duty holders to review when trying to pinpoint an appropriate checking frequency for their specific set of circumstances. However, before this can be assessed with confidence, there are two obvious scenarios that require different approaches, depending on whether there has been recent formal management or not:

- 1. No previous checks: In the scenario where there has been no obvious recent risk management and the duty holder is setting up a new regime, it is unlikely that there will be any detailed knowledge of the condition of the tree stock. This raises the possibility that large trees with the potential for imminent failure could be present, which could impart a significant level of risk, even if the occupancy was at the lower end of the range. In this circumstance, because such trees could fail well within that five-year period, duty holders could find themselves vulnerable to criticism if they delayed checks until the end of a five-year checking cycle. For this reason, where there is no prior knowledge of tree condition, there would be a strong argument that it is unreasonable to adopt the five-year frequency as the starting default. Duty holders who adopt a programme of checking all their trees as soon as they can rather than relying on the five year default would be better placed to refute criticism in the event of an incident. There is no simple answer to how soon is soon enough, but it is likely that the courts will place significant weight on the scale of the task and the resources available when deciding if the standard of duty of care has been met.
- 2. Established and ongoing management regime: The scenario where all the trees have been recently checked is different because trees with the potential for imminent failure should have already been brought under responsible management. In this situation, unless specific advice has been provided during the previous inspection that a more frequent inspection interval was necessary, then it would seem reasonable to adopt the five year default.

In summary, where there is a need to check, it is likely that duty holders who have had their trees checked every five years, and at shorter intervals where there is an obvious elevated risk of harm, will have made significant progress towards meeting their duty of care.

A FRAMEWORK FOR PROACTIVE TREE RISK MANAGEMENT

Figure 9 illustrates a staged approach to tree management that reflects the broad landscape created by all the above considerations.



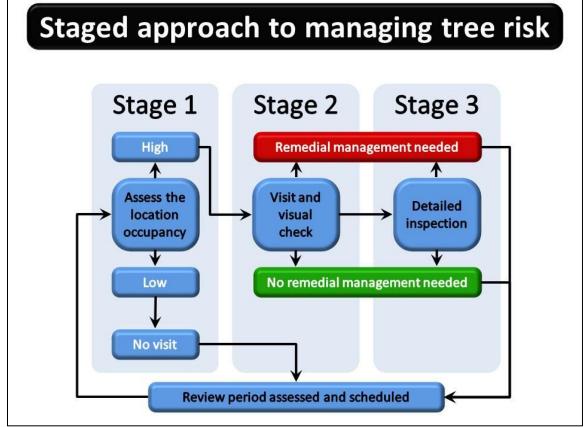


Figure 9: Three stages of responsible tree risk management

The responsible management of risk from trees can be divided into three stages:

Stage 1: The assessment of the hazard potential for the location based on the level of occupancy can be done by a layman with knowledge of the land, but no tree expertise. It is likely that, as a minimum, all duty holders would be expected to undertake this process to meet their duty of care. If there is no significant hazard potential, then there is no need to visit and check the trees.

Stage 2: If there is a significant hazard potential, then the trees will need to be visited and visually checked. Although not absolutely clear, it is likely that the courts would accept that a householder could carry out this visual check without any specialist training. However, as the landholding size increases, it is likely that the higher standard set out in the HSE SIM would be applied, i.e. the checker would need to have '...a working knowledge of trees and their defects...'. If the quick visual check did not identify any significant defects, then no further action would be necessary in that management cycle. If defects were identified, then remedial works (which could include tree works or changes to restrict access around the tree) could be specified at that point, or a further, more detailed inspection, carried out.



Stage 3: The level of a more detailed inspection would be dictated by the findings of the visual check, but it is likely that this would require specialist knowledge and that the inspector should be formally trained for the task.

If management works are required, they should be undertaken within a reasonable timescale to discharge the current responsibilities. Indeed, it is likely that failure to carry out the recommended works soon after notification would leave the duty holder exposed in the event of any legal proceedings. Furthermore, the duty of care is ongoing and is not indefinitely discharged through one round of management activity. As time passes, the situation will need to be revisited, i.e. all effective management regimes must have a reinspection provision to complete the cycle.

Figure 10 reworks this staged approach into a decision-making flow chart for duty holders in the context of the broad credentials likely to be expected of an inspector.

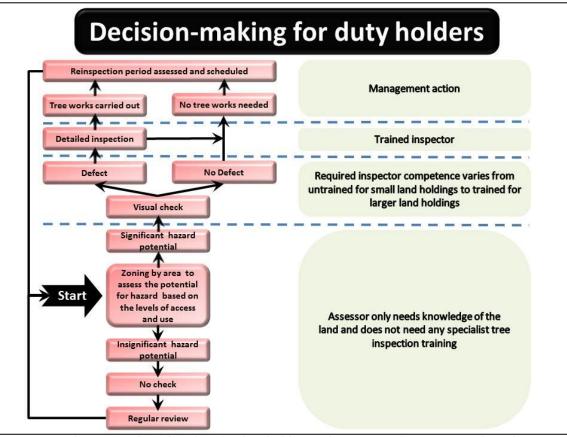


Figure 10: A decision-making flowchart for duty holders in the context of inspector credentials

The approach set out in Figures 9 and 10 is proportionate because it does not automatically require the inspection of all trees and experts do not have to be employed in the initial stage. Irrespective of the size of their land holding, it is likely



that all duty holders who go through this process would have made some significant progress towards meeting their duty of care.

Prioritizing remedial works

In an ideal world, once remedial works have been identified, then they would be carried out as soon as possible after the inspection and the duty discharged. However, organizing, implementing and financing extensive works takes time and resources, and in many instances, the ideal of doing it all at once is simply not practically possible. If extensive works are required and resources are limited, the works must be prioritized in a systematic way to ensure that the risk of harm is minimized. A common method of prioritizing works has been to quantitatively assess the level of risk and use those figures to create a work priority, with the highest levels of risk being carried out earliest in the management schedule. However, some doubts are emerging about whether a quantitative approach can properly embrace the overarching legal principles of proportionality and reasonableness.

Superficially, quantifying the level of risk by multiplying scores for 1. occupancy (number of targets), 2. size of the tree part that could fail, and 3. the likelihood of failure, is attractive because it seems intuitively right, but a deeper analysis reveals some obvious flaws from such a quantitative approach. The law is concerned with proportionality, i.e. how much will it cost to reduce the risk of harm and how much of a reduction is achieved for that cost. This principle carries with it an obvious implication that cost-effectiveness matters, i.e. where is the best effect for each unit of cost. In the context of proportionality, failing to properly consider cost-effectiveness when prioritizing works could be seen as a significant weakness by the courts and expose duty holders adopting a simplistic quantitative approach to unexpected liability.

More specifically, taking occupancy first, once the threshold for checking has been passed, i.e. there is a level of formal access that warrants a visual check, then the conventional quantitative view is that the more targets there are, the higher the level of risk and the greater the priority for action. Similarly, the reasoning for the size of the part that could fail will be the same, i.e. the bigger the part, the greater the overall risk and so the greater the priority for action. However, my experience in dealing with tree failure incidents is that a significant proportion of people do get killed or severely injured in areas of very low access and by relatively small tree parts, a practical reality that seems at odds with the quantitative theory. Furthermore, when one of these cases finally gets to court, it is inevitable that the principle of proportionality will be applied and, irrespective of the magnitude of the level of risk, if even a very low risk was easy and cheap to address, then cost-effectiveness of action may well trump the level of risk as the primary prioritization criterion.

In terms of modifying present practice, the implications of these practical observations are subtle, but profound. As set out in Figures 9 and 10, occupancy will indicate a threshold for triggering a visual check. However, where a priority for action is required, basing this on a simplistic quantification of the level of risk may be found



lacking by courts that will be carefully referencing the legal principle of proportionality, which inevitably makes the cost-effectiveness of remedial action an important consideration. Instead, it seems likely that a priority for action based on the likelihood of failure and the cost to remedy may be a safer route for duty holders. In practice, this means that leaving even small branches with a strong likelihood for failure close to low occupancy locations, i.e. infrequently used footpaths, could leave a duty holder vulnerable to criticism, especially if the cost to reduce or remove the risk was low.

THE EMERGING STANDARD OF THE DUTY OF CARE

In summary, unless trees are so remote that there is no realistic potential for harm, it is likely that the courts would expect duty holders to manage their trees proactively. In the first instance, all that is required is a quick visual check; more detailed inspection would only be necessary if this check revealed matters of concern. This check should be carried out at least every five years, and possibly more frequently if there is an obvious elevated risk of harm. It is likely that householders could carry out this visual check without any specific training, but the standard would be higher for larger land holders with greater resources. In these circumstances, it is likely that the inspector should at least have a working knowledge of trees and be able to identify and react appropriately to any significant defects. However, there is no definitive guidance for establishing where the boundaries lie between these varying standards. Where remedial works are required, it seems likely that a purely quantitative approach to prioritization may not properly address the legal principle of proportionality, and such an approach may leave duty holders vulnerable to criticism. Ultimately, all these issues will be matters for the courts to decide. In the event of harm, all duty holders and their agents should be prepared to justify and defend their decisions during crossexamination in court. Whatever route duty holders take, having due regard of the principles set out in this paper is likely to better equip them to robustly defend the tree management regimes they choose.

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(Adapted from a paper published in the Summer 2011 Arboricultural Journal)

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