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Jeremy Barrell is one of the UK's most experienced expert witness in the field of harm arising from tree failures. He qualified as a forester in 1978 and spent two years working for the UK Forestry Commission before switching to arboriculture and starting his contracting business in 1980, which provided his practical experience in tree climbing and management. In 1995 he started his tree consultancy practice, which now employs 15 people specialising in the legal and planning aspects of managing trees in the built environment.

During the last decade, Jeremy has appeared in five of the 10 civil cases relating to tree failures that have gone to court in England, and two recent inquests. In this paper, he will use that experience to review the insights that can be gleaned from these legal analyses to inform duty holders in the design of their tree risk management strategies. Although the detail is specific to England, the general principles are an integral part of managing the modern urban realm around the world, making them increasingly relevant to built-environment professionals of all nationalities.

#### TREE RISK MANAGEMENT WITHIN THE ENGLISH LEGAL SYSTEM

#### Civil cases

In England, there is a legal requirement (duty of care) for those who have responsibility for trees (duty holders) to take reasonable and proportionate precautions to reduce the risk of harm to people and property from tree failures. Where harm arises from tree failures, the injured party (Claimant) has the opportunity to seek damages from the duty holder (Defendant) and, in many instances, these matters are settled between the parties without the need to revert to the civil justice system. Where the parties cannot agree to settle their differences, the English civil courts provide the mechanism for an independent and impartial judge to hear both sides of the dispute and decide in favour of one party or the other.

A significant part of the legal process revolves around the elements that must be established in court to prove negligence, i.e. 1) that a duty of care exists; 2) the duty was breached; 3) the breach caused harm; 4) the harm was foreseeable; and 5) the harm resulted in damage. Although their precise form and detailed legal definitions may vary, common terms encountered when dealing with trees in the judicial system include:

• **Duty holder:** The entity, which can be an individual or an organisation, that is legally responsible for tree safety and management.





- **Duty of care:** A legal obligation imposed on duty holders to take care to avoid causing harm to others through the management of their trees.
- **Standard of care:** The degree of prudence and caution required of an individual or entity that has a duty of care.
- Liability: Where responsibility lies when a tree causes harm, i.e. who is to blame and who pays!
- **Negligence:** A failure to exercise the level of care in managing trees that a reasonably prudent person would exercise in similar circumstances.
- **Proportionality:** The relationship between the effort or cost to achieve an outcome and the scale of the benefits that arise from that outcome. This is a balancing process, with the desirable objective being to avoid severe extremes between the cost of what is done and the benefit that action achieves. In very general terms, if the cost of dealing with a tree condition is grossly disproportionate to the value of the benefits that work delivers, then it may be reasonable not to do it.
- "Reasonable person": A "reasonable person" is a conceptual tool for explaining the law; it is very much a loose concept and does not have the benefit of any universally accepted technical definition. However, it is still of great importance in assisting the legal decision-making process, and what a "reasonable person" could be expected to do is highly relevant to judgments about tree management.
- **Practicability:** In many situations, there is a range of actions available to address safety issues, but often the extremes may not be sensible, practically achievable, or reasonable in the circumstances. There is an expectation by the courts that, for actions to be appropriate, they need to be reasonably practicable. The difficulty for tree managers, however, is that there is no simple recipe for meeting this requirement. Instead, it is a matter of judgement that will be analysed in detail by the courts.

Lawyers usually present the case for each party and expert witnesses can be used to assist with explaining technical matters that are beyond the expertise of the court. The judge will hear the testimony of any witnesses of fact (people who were involved in the incident) and any expert witness evidence. This will be interpreted in the context of the specific circumstances of the incident and the body of recorded case law from previous disputes. The decision of the judge is usually final, but leave may be granted to appeal to the higher courts where specific points of law are at issue. There is a hierarchy of courts in the civil justice system where a single judge sits at County Court level to deal with the bulk of regional cases, or in the High Court in London to deal with higher value cases. Sitting above these, the Appeal Court and above that, the Supreme Court,





are where benches of senior judges will hear the most challenging cases. The majority of cases heard within this framework are recorded and explained in the form of written judgments, which are available for reference in future cases. Only cases that go to the Court of Appeal or higher are given significant weight as precedents for future cases, although lower court decisions can provide valuable insights into how the courts view particular issues.

There is no reliable mechanism in the UK for recording how many tree failures result in harm and so the precise number remains unknown. However, research carried out by the Centre for Decision Analysis and Risk Management at Middlesex University in 2009, on behalf of the National Tree Safety Group ("NTSG") <sup>1</sup>, identified 64 deaths during the 10 years from 1995–2004, so about six deaths a year. It also carried out a limited sample analysis of hospital accident and emergency nonfatal injury submissions over a short period (2000–2002) and extrapolated that data to estimate about 55 injuries nationally a year being attributable to falling trees or branches. No such analysis of damage to property was carried out. These figures indicate that there are roughly 60 tree failure incidents a year that result in injury, and possibly more if damage to property is considered. Although the NTSG document points out that this is a very small proportion compared to the total UK population of roughly 60 million, there is still an expectation from the courts that trees will be proactively managed where they are close to people.

#### Inquests

In general terms, an inquest is a fact-finding enquiry to establish who has died, and how, when and where the death occurred (<a href="www.judiciary.gov.uk">www.judiciary.gov.uk</a>). It is a form of public enquiry to determine the truth and is intended to be inquisitorial. This is a different thrust from the adversarial approach adopted in criminal and civil trials. Furthermore, the inquest verdict cannot be framed in such a way as to appear to determine matters of criminal or civil liability.

Through the Coroners and Justice Act 2009, coroners now have a statutory duty (as opposed to a previous discretion) to issue a report to any person or organisation where the coroner believes that action should be taken to prevent future deaths. These are called Prevention of Future Deaths ("PFD") reports and it is the stated intention of the Chief Coroner that they encourage change for the better. There is a presumption in favour of publication and as many as possible are publicised on the judiciary website. These are deemed to be important instruments of change and they can be applied to deaths associated with tree failures. To date there has only been one PFD report directly relating to tree inspections that originated from the Michael Warren Inquest in 2014<sup>2</sup>.





#### THE DOCUMENTARY BASIS FOR A TREE RISK MANAGEMENT FRAMEWORK

There is no definitive reference that precisely describes the standard of the duty of care that a duty holder must deliver to avoid criticism and liability in the event of a tree failure causing harm. Instead, there are clues to be gleaned from a variety of sources, which can assist in building a loose strategic framework to guide duty holders on how much management is enough in their particular circumstances. An important part of this jigsaw, and a very useful starting point, is the technical references published by the government regulator (the Health and Safety Executive ["HSE"]), government-endorsed organisations, the tree profession and individual commentators. Again, there is no complete list of those documents, but the ones that seem to be referenced most frequently in the English courts include:

- HSE Sector Information Minute ("SIM") Management of the risk from falling trees or branches (2013)<sup>3</sup>: This short document sets out the UK Regulator's expectations of corporate duty holders for the management of trees in a health and safety at work context. Although it states in the Summary that it is not intended as a guide to duty holders, it does set out a broad framework for decision-making that is relevant to all involved in managing trees. Indeed, it is regularly referenced in civil proceedings and is of direct relevance to corporate duty holders. Although its content primarily relates to workplace scenarios, it can be useful as a relevant benchmark, or starting point, for non-corporate duty holders, i.e. homeowners and property owners not engaged in any business operations.
- Tree inspections: a simpler alternative to the present complication and confusion, Arboricultural Association ArbNews (2013) 4: This informal article does not have the status of a peer-reviewed paper, but it is still nonetheless of relevance to tree risk managers. It describes an approach to risk management based on an intellectual weighing and balancing of the conditions that can contribute to tree failure, offering a defensible alternative to the quantitative options.
- Balancing tree benefits against tree security; the duty holder's dilemma; International Journal of Urban Forestry (2012) 5: This peer reviewed paper discusses the evolution of a tree risk management decision-making framework for duty holders. It is currently the most frequently accessed and downloaded paper in this Journal.
- Common sense risk management of trees, NTSG (2011) <sup>1</sup>: This comprehensive document resulted from a collaboration of stakeholders interested in bringing a sense of balance and proportionality to practical tree risk management. It has some very useful analysis, including an overview of the UK law, but there has been public criticism of some content and the project is currently under review. Despite the document being publicly available, the initiative is a work-in-progress, and it would be prudent to treat it with caution until the current review is published.





- *Tree Risk Assessment*; International Society of Arboriculture (2011) <sup>6</sup>: The guide is the result of an international collaboration of tree risk assessment experts, and is a valuable reference on practical tree inspection and risk assessment. However, it has limited potential for application in England at the strategic level because it does not neatly dovetail into the duty of care framework emerging from the English courts.
- Well-maintained Highways Code of Practice for Highway Maintenance Management; Department for Transport (2005) 7: This National Code sets out government guidance on best practice for highway maintenance, with section 9.13.4 (page 106) dealing specifically with the inspection of highway trees. It was last updated in September 2013, but the relevant section on risk management (9.13 Service inspection of landscaped areas and trees), remains unchanged from the original text.
- Hazards from Trees: A General Guide, Forestry Commission Practice Guide (2000) 8: This authoritative text focuses on trees in a rural woodland setting, but its principles can often be reasonably applied to trees in the urban environment. Despite being published 13 years ago, this still remains an important general reference, a status reinforced by its listing in the HSE SIM as a source of further information.
- *Inspection of highway trees*; Department of Environment Circular 52/75 (1975) <sup>9</sup>: This long-standing strategic document provides government-endorsed advice on the management of highway trees. It establishes the principle that all highway trees should be checked and offers a strategic framework for County Engineers to manage that process.

#### DESCRIBING A DECISION-MAKING FRAMEWORK FOR DUTY HOLDERS

#### The duty holder perspective

To recap, the duty holder is the person or organisation responsible for tree safety and the standard of the duty of care is the management expectation placed on the duty holder by the courts. There is no precise definition of what that standard is, but there are various references that provide some clues. Foremost amongst these is the HSE SIM *Management of the risk from falling trees or branches*<sup>3</sup>.

On the matter of whether a check is necessary, the HSE SIM sets out that a balanced approach to checking trees is required under the Health and Safety at Work Act legislation, and specifically notes in Appendix 1 that not all trees need to be inspected:

"Given the large number of trees in public spaces across the country, control measures that involve inspecting and recording every tree would appear to be disproportionate to the risk."





It advises that an effective system should consider the position and degree of public access near trees to identify if any checks or inspections are needed:

"An effective system for managing trees should meet the requirements set out in the Management of Health and Safety at Work Regulations 1999 and the associated ACOP (guidance is contained in HSG 65 Successful health and safety management and INDG 163 Five steps to risk assessment). Such a system is likely to address the following:

• An overall assessment of risks from trees - identifying groups of trees by their position and degree of public access. This will enable the risks associated with tree stocks to be prioritised, and help identify any checks or inspections needed."

If this assessment identifies that a check or inspection is needed, then the HSE SIM advises that, as a minimum, the trees should be zoned according to the degree of public access:

"There are several approaches to managing the risks from trees that involve 'zoning' trees according to the risk of them falling and causing serious injury or death. As a minimum, trees should be divided into two zones:

**Zone one** where there is frequent public access to trees (e.g. parks/ recreation grounds, in and around picnic areas, schools, children's playgrounds, popular foot paths, car parks, or at the side of busy roads). As a rough guide trees in Zone 1 are those that are closely approached by many people every day.

**Zone two** where trees are not subject to frequent public access."

For trees in Zone 1 (frequent public access), it advises that they should be periodically and proactively subjected to a quick visual check carried out by a person with a working knowledge of trees and their defects, but who need not be an arboriculture specialist:

"For trees in a frequently visited zone, a system for periodic, proactive checks is appropriate. This should involve a quick visual check for obvious signs that a tree is likely to be unstable and be carried out by a person with a working knowledge of trees and their defects, but who need not be an arboriculture specialist."

It clarifies that a more detailed inspection will only be necessary in specific circumstances:

"Inspection of individual trees will only be necessary where, for example, a tree is in, or adjacent to, an area of high public use, has structural faults that are likely to make it unstable and a decision has been made to retain the tree with these faults."

Obvious inferences to take from these statements, and the HSE SIM in its entirety, is that not all trees need to be inspected, but if there is frequent public access near them, then the starting point is a quick visual check. Although it is not clearly expressed, the last quote above seems to imply that a more detailed inspection of individual trees is only necessary if the quick visual check identifies structural faults and there is a presumption to keep the tree, i.e. if the tree is removed, then there is no need for the more detailed inspection.





Setting these strategic explanations into a practical tree management context, a defensible approach to managing the risk from trees is likely to include the following elements:

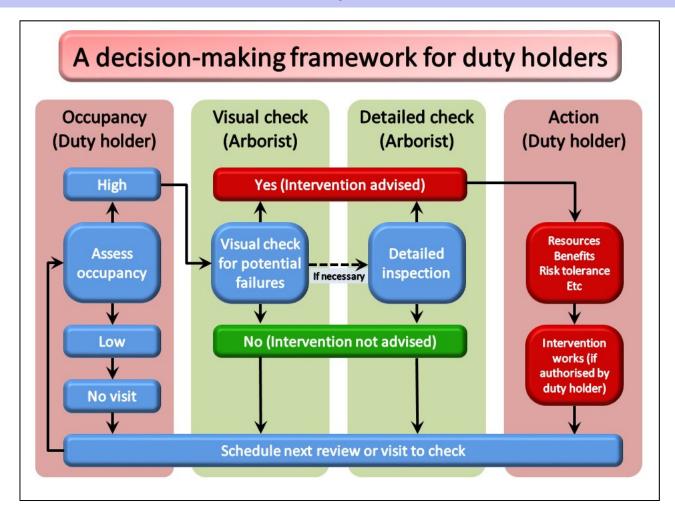
- 1. An assessment of whether there is sufficient public access near trees to warrant any visit to check.
- 2. If a visit and check is necessary, then the default starting point is a quick visual check from ground level.
- 3. If that check does not reveal any obvious problems, then a re-inspection period is assigned and no further action is necessary.
- 4. If the check reveals a problem, it can be addressed either by specifying intervention works, or by requesting a more detailed investigation if the extent of the problem needs clarification.
- 5. A detailed inspection is <u>only</u> carried out following a quick visual check and <u>only</u> if that check reveals a problem, i.e. a detailed inspection is not the default inspection approach.

The paper, *Balancing tree benefits against tree security; the duty holder's dilemma* <sup>5</sup>, explains one approach to rationalising the guidance set out in the above references on what the standard of duty of care is for duty holders. This paper should be reviewed for a more detailed explanation. Figure 1 below is adapted from that paper and provides a conceptualisation of one of a number of ways that risk management can be viewed.

There is no detailed guidance on where the precise threshold lies for the level of occupancy necessary to trigger the need to formally check trees, and so this will be a matter for the duty holder to decide. In broad terms, areas with no formal access, e.g. woodland areas distant from paths and roads, or agricultural land with low levels of use, are unlikely to require formal checks. In areas where there is formal access, such as established footpaths or agricultural land with obvious regular use, it is likely that formal tree checks would be appropriate. However, these are matters of judgement for each particular circumstance, and ultimately it will be a matter for the court to decide, if a failure results in harm and subsequent legal proceedings.







**Figure 1:** The starting point in an effective tree management process is to assess the level of occupancy of a location, which requires knowledge of the land rather than any arboricultural expertise. If there is sufficient potential for harm, then the next stage is to visit and carry out a quick visual check on any trees present. This will result in a decision to do nothing, carry out intervention works or, if further investigation is necessary, to proceed to a detailed inspection. Both the quick visual check and detailed inspection require arboricultural expertise. Whether any specified works are carried out is a decision for the duty holder, not the arborist.

#### Quick visual checks and detailed inspections

As a strategic document, the HSE SIM does not explain the difference between a quick visual check and a detailed inspection, which leaves them as matters to be interpreted in the context of good industry practice. In practical terms, and particularly where there are large numbers of trees to manage, there is an obvious requirement that the checking process takes minutes rather than hours, and should not involve anything more than looking for potential problems. Realistically, there is likely to be a spectrum of what a quick visual check can reasonably involve. In its most rigorous form, it would require looking at the whole tree from distant vantage points and then





more closely by walking up to the trunk. It could possibly involve light probing or tapping to search for subtler indications of problems, but could not reasonably extend to any type of detailed investigation such as climbing, drilling or digging. As a minimum, the HSE SIM advises that the quick visual check level of inspection should be carried out by a person with "a working knowledge of trees, but who need not be an arboricultural specialist".

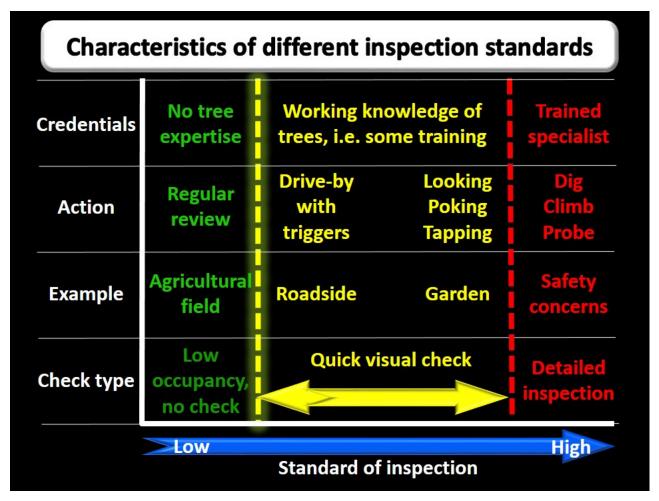
At the other end of the spectrum, for large tree populations, a quick visual check could be carried out from a moving vehicle, with some important safeguards and provided it is an integral component of a broader tree risk management strategy. The practical limitation with such an approach is that only the roadside views of the tree can be directly seen, which could result in unsighted, but easily discoverable and serious defects being missed, and dangerous trees not being identified. For that reason, it is unlikely that just driving past would be seen as sufficient without a list of triggers to cause the inspector to stop the vehicle and carry out a closer check. Such triggers could include, amongst other things, large leaning trees, species that are prone to rapidly developing stability conditions and other obvious indicators of instability.

In contrast, a more detailed level of inspection would require a significantly higher degree of skill, knowledge, training and experience than the quick visual check level of inspection. Rather than superficial viewing and probing, it could require more extensive climbing, digging and internal investigations, which could take hours compared to the much quicker visual check level of inspection.

In summary, Figure 2 illustrates some of the most obvious characteristics associated with each level of inspection.







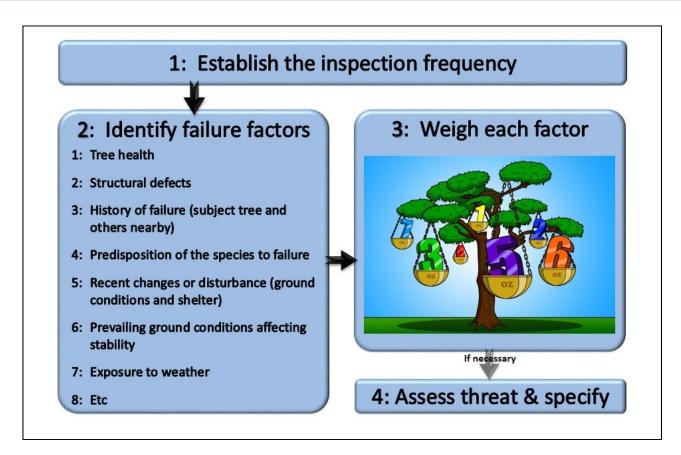
**Figure 2:** The standard of inspection increases along the horizontal axis from left to right, with the vertical axis summarising four important characteristics of each type of inspection. At the lower extreme, to the left, the green text indicates areas of low occupancy, such as an agricultural field, where no inspection is required and no tree expertise is needed to make this decision. At the higher extreme to the right, the red text indicates trees with safety concerns that require a detailed inspection using advanced techniques that have to be carried out by a specialist. The yellow text in the central area indicates where a quick visual check is required, where the default standard inspection would be on foot, but this could be adapted to a drive-by with triggers in some highway situations. The HSE SIM advises that inspectors undertaking the quick visual check level of inspection should have "a working knowledge of trees", which implies some level of training and/or experience.

#### The inspection process for checking trees

If it is decided that a tree check is appropriate, the article, *Tree inspections: a simpler alternative to the present complication and confusion* <sup>4</sup>, explains one approach to that process. This article should be reviewed for a more detailed explanation. Figure 3 below, taken from that article, provides a conceptualisation of this approach, which is just one of a number of ways that tree checks can be carried out.







**Figure 3:** Once the inspection frequency is established (panel 1), a competent inspector will systematically consider all of the failure factors listed in panel 2 that could influence the potential for a tree or a tree part to fail. Panel 3 illustrates the intellectual balancing exercise that the inspector should go through to decide how much weight to apply to all the identified failure factors to form an opinion on whether a failure is likely to occur before the next inspection. If the inspector's judgement is that a failure will occur, then the analysis moves onto assessing who or what might be harmed, and the specification of appropriate intervention works. Whether that specification is implemented is a matter for the duty holder and not the inspector.

#### Checking frequency

There is very little precise guidance on what an appropriate inspection frequency should be and it will certainly vary according to the circumstances. However, at the very least, it should be frequent enough to detect the onset of potentially hazardous conditions and their development before they reach a point of imminent failure.

At a strategic level, DoE Circular 52/75 *Inspection of highway trees* <sup>9</sup> advocates the principle of inspecting at regular intervals, although the length of that interval is not mentioned:

"4. In addition the County Engineer should arrange for examination of the trees by a competent person at regular intervals, preferably when they are in full leaf, in order to make sure that they are safe and are likely to present no danger to road users before the next inspection takes place."





More specifically, subsection 9.13.4 of *Well-maintained Highways*<sup>7</sup> explains that the default interval for arboricultural inspections should be at least every five years, but may be more frequent on advice from an arboriculturist:

"9.13.4 Most trees should ideally have an arboricultural inspection every five years but this period may be reduced on the advice of an arboriculturalist. Default intervals is for arboricultural inspections at least every five years."

In the FC's Practice Guide *Hazards from Trees: A General Guide* <sup>8</sup>, this advice is refined for woodlands as:

"A general principle to be observed is that, in areas where people or property could be at risk from tree failure, routine inspections should be carried out frequently enough to detect any hazards that may have recently developed. Hazards from large old trees sometimes develop quite rapidly, for which reason an inspection frequency of one year or more is generally advisable where such trees occur on high usage sites."

Additionally, the HSE SIM <sup>3</sup> advises that there should be provision to manage the risk from high winds, which would need to be factored into an effective management regime:

"Any system that is put in place for managing tree safety should be properly applied and monitored, including:

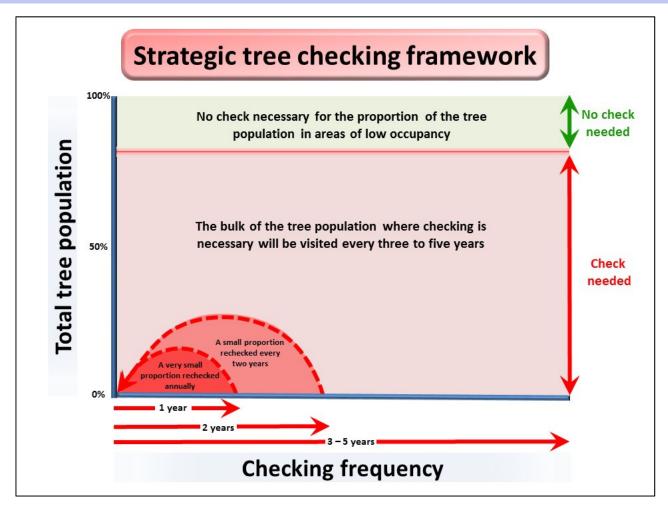
- A system to enable people to report damage to trees, such as vehicle collisions, and to trigger checks following potentially damaging activities such as work by the utilities in the vicinity of trees or severe gales.
- Procedures for ensuring the safety of the public during high winds, for example, where practicable by closing or restricting access to parks and gardens or footpaths."

This guidance recognises that there may be an elevated risk from trees both during and after severe weather events, which needs to be actively managed.

In summary, if the level of occupancy is sufficient to require trees to be checked, then the maximum length of a default checking frequency is likely to be every five years. However, where particular tree characteristics may increase the risk of failure, it may be appropriate to check more frequently, but this should be based on the advice of an arboriculturist. Additionally, provision should be made for managing the risk from trees in high winds, both during and after such events, which may mean checking more often than the overall adopted frequency. Figure 4 offers a conceptualisation of this process (without the complication of severe weather events).







**Figure 4:** There is no automatic presumption that all trees within a population must be checked. In most situations, some trees will not need to be checked, illustrated as the green shaded area above the red line. Where there are sufficient levels of access to warrant checking, shown by the red shading below the red line, the default checking frequency is every five years. A small proportion of that overall population may need to be checked more regularly, about every two years. In exceptional circumstances, a very small proportion of trees may need to be checked more frequently than this.

#### **INSIGHTS FROM RECENT CIVIL CASES AND INQUESTS**

Equally as important as technical references, written legal judgments and, to a lesser extent inquests, can provide insights from a more practical court perspective on how much management duty holders can reasonably be expected to undertake. Regarding civil cases, very few ever get to court and, when they do, they often focus in on very narrow issues, which limits the potential for meaningful interpretations. Furthermore, the relevance of those interpretations is further limited because significant legal weight is only given to cases that go to appeal to become authorities (sometimes known as precedents), with *Micklewright -v- Surrey County Council* being the only case





in the last decade to achieve that status. Indeed, since 2004, there have only been 10 written judgments, which equates to about one a year from the 60 or so potential cases that the NTSG research predicts. Those published judgments are listed below, with some further analysis in Appendix 1, and a summary of the nature of the failures in Table 1.

- 2015 Middleton -v Surrey County Council
- 2014 Stagecoach South Western Trains Ltd-v- Hind & Steel
- 2013 Battley-v- Wycombe District Council
- 2011 Bowen & Others-v- The National Trust
- 2010 Micklewright -v Surrey County Council (Court of Appeal in 2011)
- 2009 Selwyn-Smith -v- Gompels
- 2008 Atkins -v- Scott
- 2006 Corker-v- Wilson
- 2006 Poll-v- Bartholomew
- 2004 MacLellan -v The Forestry Commission

**Table 1:** Summary of the nature of recent civil cases relating to trees

Nature of the harm	Cases	Total
Failure caused death	Micklewright, Bowen	2
Failure caused injury	MacLellan, Poll, Corker, Atkins, Selwyn-Smith, Battley, Middleton	7
Failure caused damage	Stagecoach	1
Whole tree failed	MacLellan, Selwyn-Smith, Battley, Middleton	4
Branch/stem failed	Poll, Corker, Atkins, Micklewright, Bowen, Stagecoach	6

Additionally, there were two inquests in 2014 (*Michael Warren* and *Erena Wilson*), which also deal with some tree management issues that may be of interest to duty holders (see Appendix 1).

Although technical references provide the basis for drawing up a broad strategic management framework, they often do not provide the detail needed to comfort duty holders in their quest for deciding how much management is enough. In contrast, judgments and inquests can help in filling in some of the gaps, although there are far too few to provide all the clarifications that duty holders seek. Furthermore, these legal interrogations relate to the precise circumstances of each case and it becomes a matter of interpretation on how reliably they can be extrapolated to other situations.





Despite these shortcomings, it is still possible to glean some useful insights into how the courts will view certain issues, a selection of which are set out below:

#### 1: Obvious/discoverable defects

The matter of what constitutes an obvious defect is important because there is a difference between the courts' expectation from a homeowner, who is likely to sit at the lower end of the "working knowledge of trees" spectrum, and a trained tree inspector who should be able to identify the subtler signs of problems.

In Selwyn-Smith, at paragraph 33, the judge lists:

"... leaf colour, health of the crown, overall appearance of the trunk and branches for signs of decay"

as factors that a homeowner should look out for, but that did not extend to less obvious insect boreholes, which were present in the failed tree. Additionally, that duty did not extend to finding and reading publications on tree safety.

In *Middleton*, the judge expected experienced inspectors to see subtle signs of ill health in the crown of an ash tree from a drive-by inspection, and lists notable features as:

"... dead branches, a thin canopy, yellowing leaves".

#### 2: Home owner tree inspections and defects hidden by ivy

Ivy and its potential to hinder the discovery of defects regularly crops up in daily tree inspection work, raising the question of whether it should be removed as part of a risk management regime. To date, there is no definitive answer, but recent cases provide some clues as to how the courts may view this. In *Micklewright*, the experts agreed that:

#### "It would not be standard practice to remove heavy ivy from a tree during a quick visual check"

This has a compelling logic in the context of the vast numbers of trees that landowners with large estates have to manage and the multiple ecological benefits that ivy imparts. However, because it was agreed between the experts, it was never tested in the proceedings, and so that reference is unlikely to carry any significant weight.

In *Stagecoach*, the matter of ivy was considered in more detail, with the Judge stating in paragraph 86:

"I reject the suggestion that as a reasonable and prudent landowner, Ms Hind was obliged to carry out inspections of the trunks of each of her apparently-healthy trees, no matter how difficult they were to access, and no matter how much they might be covered in ivy. A reasonable and prudent landowner in Ms Hind's position was not obliged to struggle her way through the nettles and brambles to the foot of what appeared to be a healthy tree, in order to pull off some of the ivy





leaves and then strip off the lattice work of ivy stems from the base of the tree in order to look for decayed areas behind the ivy."

Whether such an analysis could extend to a formal inspection by an arboriculturist remains to be clarified, but this judgment does shed light on the likely expectations from a homeowner implementing an informal checking regime.

In summary, there is unlikely to be an automatic presumption to remove ivy when inspecting trees, but further investigations will be required if there are obvious indications of a potential problem.

#### 3: Drive-by tree checks

A drive-by survey is where a passenger looks for defects in roadside trees from within a vehicle being driven by another person. There seems to be widespread acceptance of this approach in principle for situations where there are large numbers of trees to manage with limited resources, e.g. trees adjacent to highways. However, a consensus on how this should be done is far from settled and the matter remains open to debate.

The *Michael Warren* Inquest (2014) did hear extensive evidence on the way that the local highway authority carried out drive-by tree checks. This Inquest resulted in the first ever PFD Report relating to roadside tree surveys where the Coroner expressed concern about the risk of future deaths that may occur unless action is taken. Those concerns included; inspectors having to check trees and highway matters at the same time; that the driven speed of the vehicles was rarely below 30mph; and, that inspectors were not adequately trained or provided with refresher training regarding tree hazards. The clear implication from these proceedings is that drive-by inspections should be carried out at low speed, the inspectors should only be looking at trees and they should be properly trained, with regular refresher training.

The issue of drive-by checks was also considered in *Middleton* (2015), where the judge supported the validity of this approach:

"I reject the suggestion, made by Dr Hope in evidence, that there should be a system involving an individual inspection on foot of each tree each year. I cannot see that this would be a practical approach to the problem. This seems to me to be going beyond what is reasonable. I accept Mr Barrell's evidence that a 3 year drive by inspection is a good basic regime, coupled with periodic inspections by the Highways Inspector."

It seems clear that drive-by inspections will be accepted by the courts as an appropriate approach for checking large tree populations, provided that the inspectors are properly trained and that adequate triggers for a more detailed visual check are incorporated into the process.





#### 4: Summer branch drop ("SBD")

In the UK and some other countries, SBD is a known risk to specific groups of trees and that risk may be elevated at the end of extended dry summer periods followed by rain. This poorly understood phenomenon was discussed at length during the *Erena Wilson* Inquest, with evidence that it may be commoner than first thought. Extensive evidence was submitted showing that the risk from branch failures caused by SBD and other factors (wind and snow) is actively managed in many institutions around the world, including the Royal Botanic Gardens Kew and the Royal Botanic Gardens Sydney. Indeed, at the time of the accident, Kew had a management regime in place to prune vulnerable trees on a 10-year cycle, which was formalised as a published policy document.

The facts that Kew actively manages its trees in the context of SBD, and that so many other institutions around the world do the same, combined with its increased profile resulting from this Inquest, indicate that it should be a consideration in all tree risk management regimes. Whether active management is appropriate or proportionate will depend on the specific circumstances, but it should nonetheless always be considered.

#### **CONCLUDING OBSERVATIONS**

Although the detail of these cases and inquests relates to the law in England, the broad principles that form the basis for these decisions are likely to be of interest to tree managers around the world. Large trees will always have the potential to cause serious harm where people come close to them, but as the above analysis reveals, such incidents are uncommon, considering the number of trees and people in England. However, despite such a low risk of harm, there is still a clear expectation from the courts that tree populations are proactively managed. Not all trees have to be regularly inspected, but for those that do, then being able to demonstrate a planned and active approach will greatly assist duty holders in defending themselves on those rare occasions when a tree fails and someone's luck runs out!

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The following case reviews are from an arboricultural perspective and they should not be taken in any way to be a definitive analysis of the law, which is beyond the expertise of the author and the scope of this paper. Arboricultural commentary is only provided for cases where the author was involved.

### Middleton-v- Surrey County Council (2015)

Court references	Guildford County Court; Case No: 2YM50004; 27 <sup>th</sup> March 2015.
Location of incident	A242 Gatton Park Road, Redhill, Surrey
Summary of incident	A maturing ash ( <i>Fraxinus excelsior</i> ) tree fell hitting a car causing damage and injury to the driver. The tree had extensive basal decay that was hidden by ivy. The tree was inspected 17 months before the incident by means of a drive-by inspection, but the decay was not discovered.
Expert acting for Claimant	Dr Frank Hope
Expert acting for Defendant	Jeremy Barrell
Decision	Found in favour of the Claimant. The system of inspection was reasonable, but the inspection was inadequately carried out.

### Commentary from an arboricultural perspective

- 1. **Preserving evidence:** The Judge was critical of the Defendant removing and disposing of the fallen tree before any photographs were taken or any other evidence gathered. This was made worse by the Defendant having removed the material from another high profile case a number of years before (*Micklewright-v- SCC*).
- 2. **Negligent inspection:** In the absence of any evidence showing the condition of the crown of the tree, the judge found that there would have been evidence of poor health in the crown, probably consisting of dead branches, a thin canopy and yellowing leaves. These vital signs were missed and there was negligence in the way that the inspection was carried out.
- 3. **Adequate system of inspection:** The judge rejected the Claimant's suggestion that an adequate regime should involve an individual inspection on foot every year because it would be impractical. She accepted that, for this set of circumstances, a drive-by inspection every three years is a good basic regime, coupled with inspections by Highway Inspectors.

#### Michael Warren Inquest (2014)

Court references	Held at Windsor Guild Hall by the Senior Coroner for Berkshire; Narrative Verdict, dated 10 <sup>th</sup> July 2014; PFD Report issued 17 <sup>th</sup> July 2014.
Location of incident	A332 Windsor Road, Berkshire
Summary of incident	A branch from a mature oak ( <i>Quercus robur</i> ) fell and hit a car causing fatal injuries to the driver. The branch was imbalanced out over the road and had internal decay beneath a closed wound near the point of failure. The tree was subjected to a drive-by inspection two days before the incident,





	but no problems were identified.
Expert for Highway Authority	Dr Frank Hope
Expert for Coroner	Jeremy Barrell
Expert for Warren Family	Henry Girling
Narrative verdict	A Narrative Verdict reported that the failed branch accidentally struck the car when it fell without warning. Additionally, a PFD Report was issued that raised a number of matters of concern relating to the inspection regime.

#### Commentary from an arboricultural perspective

- 1. **PFD Report:** This is the only PFD Report that has been issued relating to highway tree inspection regimes. It raised concerns over the limited nature of training provided to Highway Inspectors in identifying potential hazards from trees. It also articulated the need for an appropriate system of work, to include guidance on the speed at which drive-by inspections are carried out and that those inspections are limited to trees only, rather than looking at trees and the highway at the same time.
- 2. Imbalance and large occluded wounds: This incident highlights that severe imbalance of large branches or whole trees, in combination with other weakening conditions, are situations where inspectors should be vigilant when assessing the potential for failure. This particularly applies to large old wounds on mature trees that have fully occluded, because the lack of any external signs of decay can be taken to imply that there is no significant weakness. That may well be the case on young trees that are growing rapidly and have compensated for any weakness. However, older trees growing more slowly may not be able to put on sufficient reaction wood to adequately compensate against the inevitable decay that arises from the wounding, which may result in a gradual weakening over time. There is no automatic implication that large occluded wounds on mature trees are always a problem, but this incident suggests that they should be carefully considered when assessing the potential for failure.

#### **Erena Wilson Inquest (2014)**

Court references	Held at West London Coroner's Court by the Assistant Coroner; Verdict of accidental death, dated 12 <sup>th</sup> June 2014.
Location of incident	Royal Botanic Gardens Kew ("RBGK"), London
Summary of incident	A branch from a mature cedar ( <i>Cedrus libani</i> ) fell and hit a pedestrian on a busy path causing fatal injuries. The tree was subjected to regular inspections, but there were no obvious indications that the branch would fail when it did.
Expert acting for RBGK	Tony Kirkham
Expert for the Coroner	Dr David Lonsdale
Expert for the Wilson Family	Jeremy Barrell
Verdict	The Jury returned a verdict of accidental death, stating that "there is





insufficient evidence to establish the cause of the branch failure".

#### Commentary from an arboricultural perspective

1. Summer Branch Drop ("SBD"): One of the main issues explored at the Inquest was whether the branch failure was due to SBD, a loosely defined condition used to group branch failure events that occur on mature trees during the summer with no obvious cause. There were differing opinions from the experts on the cause and the jury concluded that there was insufficient evidence to make a decision. However, RBGK explained at the hearing that it was aware of the risks from branch failures caused by SBD and other factors (wind and snow), and that it had a management regime in place to prune vulnerable trees on a 10-year cycle. This was formalised as a published policy document.

### Stagecoach South Western Trains Ltd-v- Hind & Steel (2014)

Court references	High Court; Case No: [2014] EWHC 1891 (TCC); 11 <sup>th</sup> June 2014; Download at www.bailii.org/ew/cases/EWHC/TCC/2014/1891.html.
Location of incident	Rose Cottage, Staines, Surrey
Summary of incident	A stem of a mature ash ( <i>Fraxinus excelsior</i> ) tree fell hitting a train causing damage agreed between the parties at £325,000. The tree had extensive basal decay that was hidden by ivy. The tree was informally checked by the home owner, Ms Hind, and worked on by an arborist, Mr Steel, before the failure, but the decay was not discovered.
Expert acting for Claimant	Ken Sheppard
Expert for First Defendant	Jeremy Barrell
Expert for Second Defendant	Simon Pryce
Decision	The Claimant's case was dismissed against both Defendants.

#### Commentary from an arboricultural perspective

- 1. Homeowner duty: Legal commentators report how the Judge held that Ms Hind's (the First Defendant) duty in respect of a tree on her land had extended no further than the carrying out of periodic inspection through informal observation. In the absence of any trigger or warning sign of problems with the tree, there was no requirement to instruct a more detailed inspection by an arboriculturist. She was not required to clear ivy to inspect the base herself or instruct an arboriculturist to do so.
- 2. National Tree Safety Group ("NTSG") informal observations: At paragraph 53, under *Published Guidance*, this judgment refers to the NTSG guidance that informal observations may be used as a means of checking trees. For this case, it was unchallenged that this was a legitimate form of inspection; it was held that Ms Hind was able to carry out such an inspection and did so properly. This is the first judgment since the NTSG document was published that has directly referenced the informal observations approach to inspections and, no doubt, many homeowners will feel that it is a welcome clarification on the nature of their obligations. However, it does not automatically follow that larger landowners, who may have greater resources, can rely on informal observations as being sufficient for all types of circumstances. This is an aspect that still requires clarification.





3. **Duty of care of arborists who work on trees:** The tree had been worked on before the accident by the Second Defendant tree surgeon, Mr Steel, but he had not been asked to consider the health or safety of the tree. The claim against him also failed because he did not owe a duty of care to warn of any structural instability, which could only have been discovered through a close inspection.

### **Battley-v- Wycombe District Council** (2013)

Court references	Central London County Court; Case No: 0WL00094; 9th July 2013.
Location of incident	May Balfour Gardens, High Wycombe
Summary of incident	A mature Lombardy poplar ( <i>Populus nigra</i> ) tree fell as a result of high winds and root decay, hitting a pedestrian and causing serious injuries. The Defendant owned the tree, but had not known that, and admitted negligence for not inspecting it.
Expert acting for Claimant	Dr Frank Hope
Expert acting for Defendant	Dr Martin Dobson
Decision	The judge found in favour of the Claimant.

### Bowen & Others -v- National Trust (2011)

Court references	High Court; Case No: HQ10X01869; 27 <sup>th</sup> July 2011.
Location of incident	Felbrigg Hall, Suffolk
Summary of incident	A branch from a mature beech ( <i>Fagus sylvatica</i> ) tree fell and hit group of school children sheltering beneath in bad weather, causing one fatality and seriously injuring three others. The tree was part of a formal inspection regime and the inspectors had been trained to deal with tree hazards. The tree had been properly checked before the failure several times and, each time, no intervention works were specified. The judge held that the inspectors used all the care to be expected of reasonably competent persons doing their job, and that the Defendant had given them adequate training and instruction.
Expert acting for Claimant	Julian Forbes-Laird
Expert acting for Defendant	Dr David Lonsdale
Decision	The judge found in favour of the Defendant.

### Micklewright-v- Surrey County Council (2010)

	County Court Judgment in Guildford County Court; Case No: 8GU02043; 20th October 2010.
Court references	Court of Appeal; Neutral Citation No: [2011] EWCA Civ 922; Case No: B3/2010/2700; 28 <sup>th</sup> July 2011; Download at <a href="http://www.bailii.org/ew/cases/EWCA/Civ/2011/922.html">http://www.bailii.org/ew/cases/EWCA/Civ/2011/922.html</a> .
Location of incident	Wick Road, Virginia Water, Windsor, Surrey





Summary of incident	A large branch from a mature oak ( <i>Quercus robur</i> ) tree about 28–30m in height fell hitting a man who had just got out of his car, having parked beneath the tree, causing him fatal injuries. The tree had extensive ivy covering it and was not part of a formal checking regime. The branch that failed had internal decay, but this was not visible from a ground-based visual check.
Expert acting for Claimant	Jonathan Cocking
Expert acting for Defendant	Jeremy Barrell
Decision	The Claimant's case was dismissed in the County Court hearing, which was upheld at Appeal.

#### Commentary from an arboricultural perspective

- 1. Retention of tree incident material: The Defendant did not make provision to retain all the evidence of the fallen branch, which prevented the Claimant inspecting the bulk of branch. As a result, it was held that "... the Court should judge the Claimant's evidence benevolently and the Defendant's evidence critically." This was also a key issue explored in the Appeal, which upheld the original decision. The obvious wider implication from this is that a failure to retain evidence after an incident could prejudice Defendants.
- 2. **The need to inspect highway trees:** The court found against the Defendant for not having a formal inspection process in place for this tree, despite the location being a public highway, albeit a low category road. However, it was held that even if the tree had been inspected, this would not have resulted in works that would have prevented the failure, and so the Claimant was unsuccessful.

### Selwyn-Smith-v- Gompels (2009)

Court references	Swindon County Court; Case No: 8SN00362; 22nd December 2009.
Location of incident	Great Hinton, Trowbridge, Wiltshire
Summary of incident	A mature Austrian pine ( <i>Pinus nigra</i> ) tree about 28m in height snapped at about 2m above ground level and fell onto a neighbour's garage. The neighbour was inside the garage at the time and suffered serious injuries. Subsequent investigations found that the base of the tree had severe basal decay from the fungus <i>Phaeolus schweinitzii</i> , but this was not obvious from external views. The tree owner made regular and informal examinations of the tree, but did not see any signs of distress. There were no external signs of the internal decay, but there were some insect boreholes present on the trunk that could be seen on close examination.
Expert acting for Claimant	Jonathan Cocking
Expert acting for Defendant	Dr Dealga O'Callaghan
Decision	The judge found in favour of the Defendant.

Atkins-v- Scott (2008)





Court references	County Court Judgment in Aldershot & Farnham County Court; Case No: 6KB04804; 14 <sup>th</sup> August 2008.
Location of incident	Rotherfield Estate, East Tistead, Hampshire
Summary of incident	A large branch from a mature oak ( <i>Quercus robur</i> ) tree fell hitting a vehicle, causing serious injuries to the driver. The tree was part of a formal checking regime implemented by employees of the estate that it stood on. The branch that failed had internal decay and a crack in its upper side, but it was held that none of these defects would have been visible from a ground-based visual check.
Expert acting for Claimant	lan Murat
Expert acting for Defendant	Jeremy Barrell
Decision	The Claimant's case was dismissed.

#### Commentary from an arboricultural perspective

- Checks by employees with experience, but no formal qualifications: The Defendant's trees were inspected regularly by employees who had decades of experience working on the estate and managing trees. However, they did not have any formal qualifications. Two employees gave evidence and it was held that they were sufficiently experienced and knowledgeable to identify serious hazards and know what to do about them if they were discovered.
- 2. **Keeping formal records:** The Defendant did not have extensive formal records of the tree management regime that was operated, but the owner, employees and agents, gave evidence on this aspect and it was held that this was an adequate regime. There is no legal requirement to keep formal records, but it can greatly assist in confirming that a regime is appropriate if such records exist.

#### Corker-v- Wilson (2006)

Court references	City of London Court; Case No: 5MY04657; 10 <sup>th</sup> November 2006.
Location of incident	Horsham Road, Abinger Hammer, Surrey
Summary of incident	A branch from an oak ( <i>Quercus robun</i> ) tree fell from a tree on land adjacent to the highway and hit a car causing injury to the Claimant. The Defendant was a layman in relation to trees and had carried out regular, but informal, inspections of it. It seemed healthy, with nothing unusual about it. It was found that there was a crack on top of the branch, but that it would not have been discovered during visual inspection from the ground.
Expert acting for Claimant	Dr David Rose
Expert acting for Defendant	Colin Bashford
Decision	The judge found in favour of the Defendant.

#### Poll-v- Bartholomew (2006)

Court references	High Court; Case No: 4BS50384; 11th October 2006.
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Location of incident	Old Wells Road, Mells, Somerset
Summary of incident	One of four stems fell from a maturing hedgerow ash ( <i>Fraxinus excelsior</i> ) tree, with which a motorcyclist collided, causing him serious injuries. There was an included bark union where the failed stem joined the base of the tree and there was also a fungal bracket beneath the stem that fell. The weak union was not visible from the road because of thick vegetation, but it would have been possible to discover it by approaching the tree.
Expert acting for Claimant	Jeremy Barrell
Expert acting for Defendant	Dr Dealga O'Callaghan
Decision	The case was found in favour of the Claimant.

#### Commentary from an arboricultural perspective

- 1. **Structural and health indicators of instability:** This case highlighted that although health problems such as dying branches or unhealthy foliage are obvious indicators of potential problems, equally as important are structural conditions that may require a closer check to discover. The ash that failed was in a hedgerow that had been regularly cut close to the ground and the judge held that a competent inspector should have been alert to that and looked for structural conditions that this management was known to produce, namely multiple stems that could have included bark, making them more vulnerable to failure.
- 2. Level of inspector competence: The experts agreed, and the judge accepted that "A 'Competent Person' as recommended in Circular 52/75 will have sufficient training, expertise and/or qualifications to identify tree hazards, assess the levels of risk and make appropriate management recommendations." This debunks the common myth that formal qualifications are the principal means of assessing competence; practical experience is equally as important, and should not be dismissed out of hand.

#### MacLellan - v- The Forestry Commission (2004)

Court references	High Court (Bristol District Registry); Case No: BS250655; Uncertain hearing date, but believed to be in 2004.
Location of incident	Bilbins Bridge, Lady Park Wood, Forest of Dean
Summary of incident	A large ash ( <i>Fraxinus excelsion</i> ) tree about 20m in height fell from Forestry Commission land and hit the Claimant who was walking along a public footpath. It fell in snowy weather through its roots pulling out of the ground in unstable soil.
Experts acting for Claimant	Jerry Ross, Colin Bashford
Experts acting for Defendant	Roy Finch, Dr David Lonsdale
Decision	The judge found in favour of the Defendant because there was a reasonable system of inspection in place carried out by dedicated and skilled employees who would know a danger when they saw one.