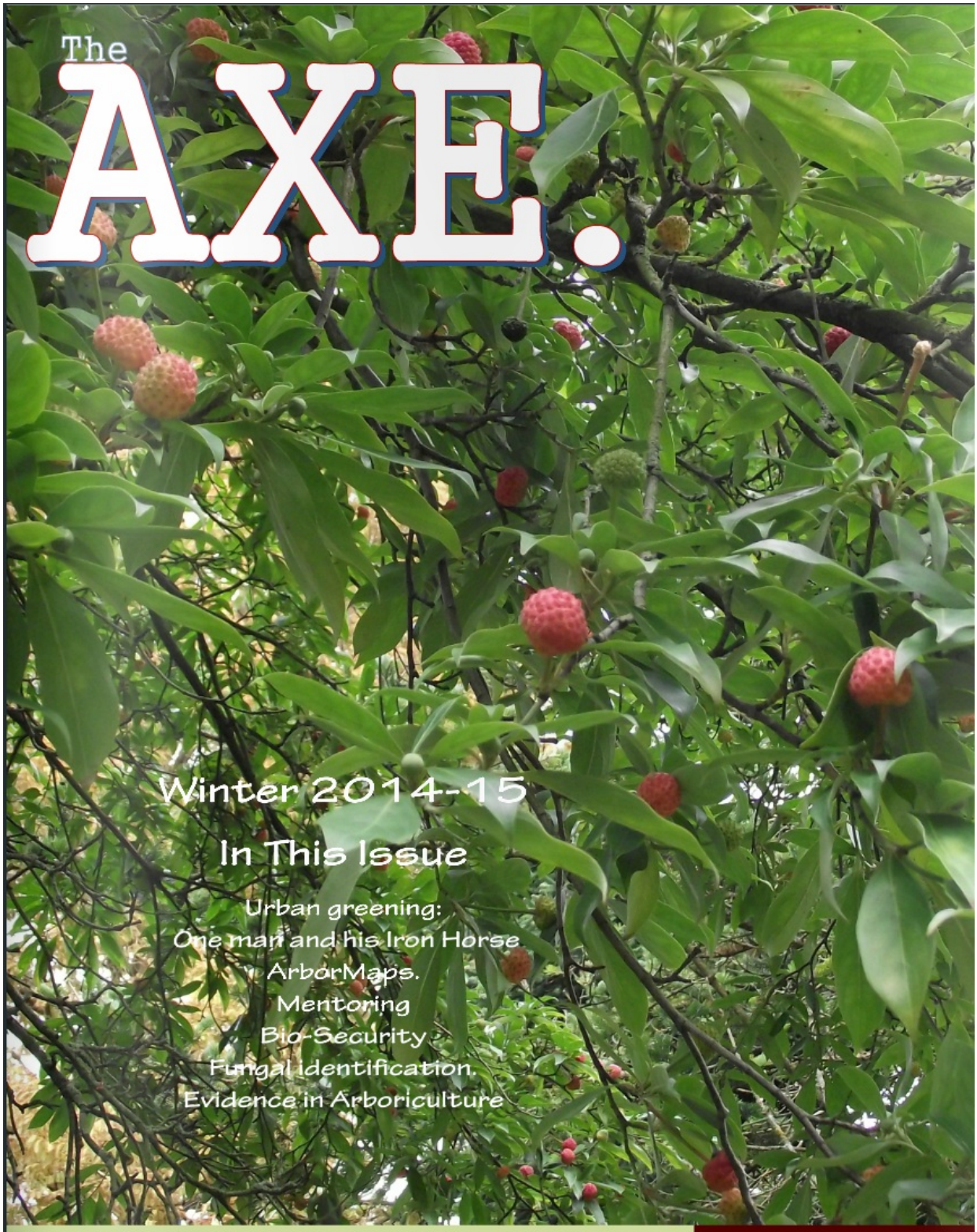

The AXE.

Winter 2014-15

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AN AXE TO GRIND. MTOA's QUARTERLY MAGAZINE

Municipal Tree Officers' Association
MTOA
The Voice of Municipal Arboriculture

Evidence in Arboriculture

Disputes about trees are commonplace. They include questions about ownership, responsibility for management, health, risk, site suitability, growth rates, how best to prune a tree, and whether or not what was requested, was actually delivered as expected. Resolving these disputes always hinges on the evidence available to prove or disprove claims and counter claims. In all cases the evidence is the basis used to agree upon facts. Many disputes can be settled simply enough by a careful review of the evidence. But that presumes the parties involved have been diligent and collected well organised documentation of the evidence needed to convincingly support the claims made.

Evidence comes in many forms and includes pieces of material, documents, digital records, photographs or video, as well as test data, other records, analysis of results, and process descriptions. As a matter of due diligence arborists should have a professional practice approach that includes systematic collection of evidence in their daily work. In the event of a dispute, there will then be records about:

- what the client requested
- what the contractor or consultant offered including :
  - scope of work
  - approach to be used
  - specific trees involved by location
  - timeframe for action
  - expected results
  - estimated costs
  - any limitations involved.
- before and after images of the tree(s) and site clearly showing the issues to be addressed before and after work was undertaken.

- a timesheet documenting details about names of who was contacted, when (dates and times), and notes about conversations, emails, written notes or reports exchanged.

Most of the above items are easy to implement and are a good foundation of professional practice. Simple things such as photographing a tree to be pruned and the landscape and site conditions before work starts, and again once work is completed, can save considerable aggravation later on if claims are made that the contractor has caused damage to other trees or parts of the landscape.

Evidence become more important if the dispute comes before decision making bodies that have powers to collect fines (such as local councils) or award damages (courts).

In these cases evidence and facts become critical. In a court the judge or jury make decisions based on what they can learn from the evidence presented to them. Some of that will be agreed upon as factual, that is, an accurate representation of what took place or what was seen, heard, said, or written. Other parts of the evidence may be controversial or inconclusive and open to interpretation. Documenting evidence effectively is a skill that should be more commonly developed. Many court cases note that "..what the evidence tells the court is just as important as what the evidence does not tell the court..."

The role of the judge, in their capacity as the 'trier of fact' is to review all of the available evidence and establish what is or is not acceptable, and what is or is not going to be accepted as 'fact.' In order to do this there needs to be evidence that accurately describes the matter before the court. Judges and juries use the evidence and established facts to make decisions about what took place, who is or is not responsible, and who shall pay for what. All of these steps are based on evidence. In most court cases the judge and / or jury have never seen the site, do not know the people, and often have little or no knowledge about the technical issues involved. All they have to work with is the evidence presented in court.

Evidence can take many forms. In a tree case, the starting point would be the tree itself. That is the primary evidence. The process used to determine if decay is present or absent may be the next stage, and the results of testing would become a further piece of evidence. The analysis of the results, and the implications of the analysis then become additional evidence, and all pieces, taken together, are used to support the final opinion.

One of the most common areas of dispute in courts reports deals with verbal evidence. Who said what to whom, and when? Commonly part A will claim that Part B was told about certain issues. Party B will refute this stating that they were not told, or were only partially told, or that they thought that what was said was X when, according to Party A, they meant Y. Verbal misunderstandings cause a lot of uncertainty, which is why clearly written reports, meeting minutes, and site notes can become such a critical part of evidence later on.

Certain phrases commonly occur in judgements:

Phrase	Implication
...there is insufficient evidence to support the stated opinion...	The claim made doesn't hold water and cannot be believed.
...the evidence presented is contradictory and inconsistent...	How are we supposed to know who is right or wrong?
...the evidence presented by Party A is not credible when considered against their actions...	You say you did one thing but we know you also did other things which are different. We don't believe what you say.
...the evidence was not supported by cross examination...	When questioned, your answers seem to be different from what you claim the evidence implies.
...there was no evidence suggesting that ...	There is nothing to prove or support a claim.
...despite other arguments the evidence cannot be disregarded...	The evidence before me suggests that these other arguments are not credible.

In a court case, evidence has to be credible to be useful. There of course many areas outside the court where evidence plays a vital role. Simply having a clear record of meetings, discussions on site, photographs of site conditions, or of work undertaken is often an important step to preventing issues

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going to court. Other professionals use these techniques all the time to assemble a defensible record of who did what, when, why, and how, and with what result. Learning how to document and explain evidence is important for any assignment, whether it is a simple letter, or an expert report for court testimony. Evidence is the foundation of analysis, discussions, conclusions, and final opinion. Describing evidence requires effective communication, which includes written or verbal descriptions, photographs, sketches, diagrams, and plans. These forms of communication are used to tell the story. They describe

what you saw at various scales;
how you recognised the evidence;
how you analysed it; and
how you interpreted all of this to arrive at your opinions.

To collect and document evidence effectively, several important steps are required. You need to know

1. what to look for, and how to find it;
2. what you are looking at and understand its implications;
3. what to sample and why;
4. how best to collect and record the data;
5. how to describe what you saw;
6. how to best analyse the evidence collected, and be aware of the various strengths and weaknesses of any one approach;
7. how to discern the important from the irrelevant;
8. how to assess the sequence of events documented, and show their relevance to the thread of causality, and
9. how to describe the process used to arrive at your opinions and evidence based conclusion

In practice there may be additional issues to consider, not the least of which are bias (the tendency to describe an issue in a certain way), and conflicts of interest. For example tree care companies conducting risk assessments may be tempted to recommend removals simply to generate additional work for their company. Or, there may be tensions between what the client or client's lawyer wants stated, versus a clinical and objective analysis of what you see as the facts, which may be in conflict with the client's opinions.

A key to successful use of evidence to is to understand that your opinion must be clearly supported by the evidence. For your opinion to be accepted as true (factual), the evidence and your analysis and interpretation of its implications must follow a well-reasoned thought pattern. If your conclusions are not supported by the evidence, then what you are seeing and discussing may lead others to a very different conclusion. Evidence is strongest when it provides incontrovertible proof that that there is a direct link between the cause and the effect. Evidence is at its weakest when the link between the cause and effect is consistent with one assertion but may be open to other assertions that are equally plausible.

To form a defensible opinion you need to know the importance of the evidence, the reliability of
it, the accepted ways it might be analysed, and the strength and weaknesses of all of these parts. If the
foundational data is not accurate then all subsequent analysis and decisions will be inaccurate. Critical to the whole process is to ensure that the evidence establishes facts, and not the other way around.

Not all evidence is immediately obvious, and even when it is clearly visible, not all evidence presents
itself as important. There are two key principles to follow:

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1. Know what to look for.
2. Know what you are looking at.

A key step at this stage is to answer the question, is the absence of evidence, evidence of absence?"
For example, just because no fungal fruiting bodies were observed, does not automatically mean the
tree has no decay (although that may well be true). Suppose the absence of fruiting bodies is due to
the type of fungus (annual versus perennial conks), the time of year you see the evidence, the stage of
growth (not yet advanced enough to produce a fruiting body), or the presence of a decay that seldom
shows up easily (such as only on the underside of roots). These are limitations that need to be known
and understood, because if you have them wrong, your analysis and conclusions may also be wrong.

Collecting evidence requires a systematic approach. Before arriving on site it is useful to envisage the range of situations that may be encountered and be prepared for any of them. On site, do not be rushed, and avoid being pressured into seeing the evidence based on what the client has told you. Do not get sidetracked by the obvious and then forget to check other factors. Conversely, do not get hung up on the esoteric and then miss the obvious. Know how to properly collect evidence. There are well-established protocols for aspects such as soil, water, and foliage sampling. Be thorough in identifying and documenting what you see, and be sure that what you see belongs where you see it. For example, if you find a perennial conk on the ground and you recognise it as a fruiting body associated with root rot, are you sure it is in its original location, or has it been moved around? Document its location before moving it and note that it might have been moved. Have a well-planned sampling strategy in place before you arrive to ensure that your time on site is used well. Decide beforehand what it is you want to test for and never forget that you may only get one opportunity to visit the site to collect or document evidence.

A picture is worth a thousand words, especially when it comes to conveying detailed information.
Most evidence can be presented in images, although physical evidence may also be critical in some
instances, especially where forensic analysis of plant parts, wood, or soils has been conducted. The starting point is to have photographic images that clearly show

what the evidence looked like on the day the image was created;
how any one image relates to the overall site and overall tree;
where detailed images fit in the larger scale;
specific details that informed your analysis.

Courts generally allow evidence and particularly photographs if it is relevant to the matter at trial. In general all photographs must fairly and accurately depict the site, or event under discussion. If the image has been altered by adjusting shadow details to reveal what might otherwise not be visible, provide a before and after image and clearly note what was done to derive the new photograph. It should be obvious but bears noting, that any alterations that materially alter content may be disqualified, and in the process will almost certainly taint any other opinions offered.

In summary, for your opinion to be effective, understanding how to collect, document, and analyse evidence is vital. Evidence forms the foundation of your opinions or conclusions. You need to know what to look

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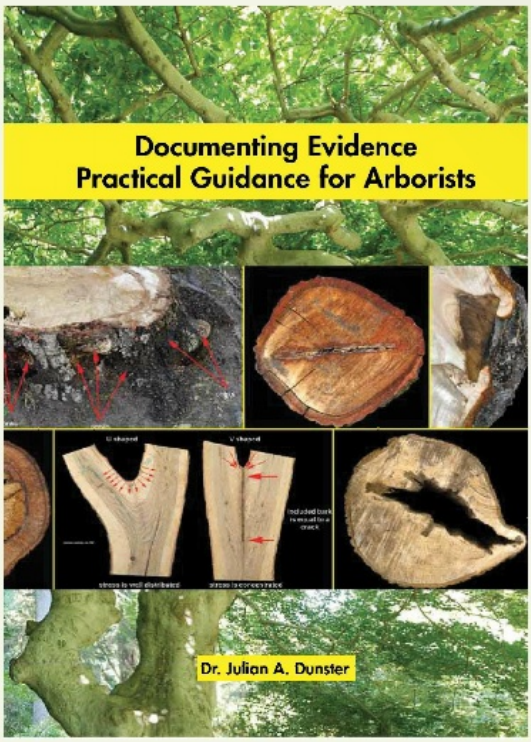
for, and what you are looking at. You need to be able to document and describe what you saw, why it was or was not important, how you analysed this, and how you interpreted all of these aspects. At the end, the evidence examined, the process used, and the opinions or conclusions reached all have to make sense. Be sure that your opinion is clearly supported by the evidence available. Acknowledge areas of uncertainty, gaps in the evidence or data, and areas that may affect your opinion. Above all, remember that evidence establishes facts, not the other way around. Never stretch the evidence to make it fit the facts desired by the client.

Julian Dunster is a Forester, Planner, and Registered Consulting Arborist based in Victoria, British Columbia, Canada. He is an Honorary Life member of the International Society of Arboriculture (ISA) and the Pacific Northwest Chapter of ISA. His new book *Documenting Evidence: Practical Guidance for Arborists* is available from the UKI chapter of ISA.

Julian can be reached by email - jd@dunster.ca. Additional information can be found at www.dunster.ca.



Evidence is a critical part of our daily work. This new book by Julian Dunster provides a comprehensive review of why and how evidence should be collected and documented. Using examples and colour photographs from several decades of experience, the author lays out the steps necessary to provide evidence that accurately reflects conditions on site. This includes the processes necessary to think through what will be needed before the site visit takes place, while on site, and afterwards, when analysing the materials in order to form an opinion based on accurate and unbiased evidence.

The book will be of interest to arborists, foresters, and consultants wishing to show what they did, how they did it, and how they derived their opinions.

Recommended retail price is £25. Bulk discounts available.

This book can be ordered from the MTOA office enquiries@mtoa.co.uk