



Sheffield's Shame; Arboriculture's gain?

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SHEFFIELD'S SHAME. ARBORICULTURE'S GAIN?

In 2015, Arboricultural Consultant **Jeremy Barrell FICFor** investigated Sheffield's alleged wholesale removal of healthy street trees. Three years on, he returned and was shocked by what he found

In 2015 I visited Sheffield to investigate the alleged wholesale removal of healthy street trees by the Council's highway contractor Amey as part of a £2.2 billion Public/Private Finance Initiative (PFI) contract. So surprised by what I saw, I recorded my findings in an article, *Highways, trees, and people: Sheffield's secret shame*. In April this year I revisited Sheffield and discovered that not only has the felling continued at a rate of more than 1,000 trees a year, it is set to

carry on until 17,500 of the 36,000 street trees are removed.

A common tactic used by local politicians is the selective misrepresentation of technical information as justification for the tree removals. Hijacking and misusing technical arguments is an obvious matter of professional concern and yet it is difficult to counter without research-based evidence. Arboriculture is a young profession, and much of its thinking is still evolving, which makes its core principles

particularly vulnerable to exploitation. Here, I have explored how the Sheffield experience might offer some pointers to where more research support for arboriculture would be most beneficial.

First though, to address any concerns about conflicts of interest, I confirm that I have no personal or financial connections with any of the parties that I know to be involved in the current or past management of Sheffield's street trees. I have not worked in the city, nor have been paid for any technical input, and I have not acted on behalf of any party; I simply visited and commented out of professional interest.

Brief background

Sheffield's street tree fellings' saga is long and complex; too much to attempt to relay in this short article. It has, however, been well documented in the press and you can find more detail by searching online for 'Sheffield trees' and 'The Guardian', 'The Independent', 'The Times', 'New York Times', 'Yorkshire Post', 'Sheffield Star', 'Sheffield Tree Action Group' (STAG), and 'Amey Sheffield Streets Ahead'.

In 2012, Sheffield City Council (SCC) entered into a 25-year highway maintenance and management PFI contract with Amey, which involves 'improving and maintaining 36,000 street trees'. Since it started, nearly 6,000 trees have been felled and, although much of the PFI contract is secret, freedom of information requests forced disclosure of a target to remove 17,500 of the 36,000 trees over the contract period. Concerned residents, objecting to the felling of healthy and sound trees, created an alliance called STAG to campaign for an end to the



Canadian urban forest management consultant Philip van Wassenauer discusses Sheffield tree issues with Chris Packham



Protesters trying to protect trees in Sheffield

unnecessary felling and gathered a Facebook following of nearly 10,000. In a gesture to address concerns, SCC set up an Independent Tree Panel to assess disputed tree removals, but a consistent failure to respect many of its recommendations has side-lined it as a credible initiative. In 2016, a High Court challenge to the felling was unsuccessful. Subsequently, objectors began to intensify peaceful protest which resulted in SCC successfully applying for a High Court Injunction in 2017 to forbid protestors accessing designated work areas. Enforcement of that injunction has resulted in several arrests and legal proceedings are ongoing against a number of individuals.

Urban tree benefits

There is an increasing and overwhelming evidence base of research and anecdotal reports describing the benefits trees impart to people in the built environment. For example, from the human health aspect, they range from the obvious capturing particulate pollution by leaves, to the subtler improvements in wellbeing people enjoy from green and calming surroundings. From a wider management perspective, an obvious benefit is the daily reduction in temperature extremes; less obvious, but equally as useful, is the sequestration of carbon over decades and centuries, in wood, roots and soil.

Of course, trees can cause problems as well, with adverse impacts including damage to structures; harm from failures;

“Such knee-jerk responses now have no place in modern built-environment management where sustainability is imperative.”

excessive shading; and falling debris, to name but a few. Indeed, some situations are so severe that early tree removal is an appropriate response, but the presence of so many retained mature urban trees demonstrates it is the exception, not the rule. Improving technology and experience now offer intermediate solutions before the last resort of felling is reached. Where conflicts arise, intelligent management demands that a balancing exercise is undertaken – weighing the benefits against the problems – before forming a view and acting. In the past, with little reliable information on the value of trees, managers had a tentative excuse to fell at the slightest hint of a problem. However, thinking has evolved quickly, and such knee-jerk responses now have no place in modern built-environment management where sustainability is imperative.

National political perspective

Historically, such a cost/benefit approach had been repeatedly side-lined as an

academic aspiration and rarely managed to exert any influence in practice. Now, however, fuelled by the increasing knowledge base, an emerging political awareness at a national level is rapidly pushing the principle into mainstream thinking. In February 2018, the government published its draft 25 Year Environment Plan (25YP), *A Green Future: Our 25 Year Plan to Improve the Environment*, a flagship document endorsed by the Prime Minister which includes multiple references to a ‘Natural Capital Accounting’ approach to inform decision making. Hot on its heels, draft proposals to update the National Planning Policy Framework reiterated the principle of ‘Net Environmental Gains’ as a mainstay of ensuring that the value of natural assets is factored into planning decisions.

Although still in the process of consultation, they identify a national government ambition to place nature closer to the heart of decision making, which is new and to be applauded if it translates into increased urban canopy cover.

Focusing on urban trees, the 25YP states an intention for government to ‘Introduce new requirements to ensure councils properly consult if they are considering removing street trees’, which is undoubtedly directed at preventing a repeat of the Sheffield environmental asset mismanagement in other UK cities. There

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is also a commitment to appoint a National Tree Champion¹, further recognition that trees are becoming more central in government thinking. In parallel with these initiatives, the Trees & Design Action Group has been developing proposals for a National Tree & Woodland Strategy to pull all these threads together into one coherent approach to delivering tree benefits across the UK.

Political misrepresentation of technical matters

As a passionate advocate of the importance of urban tree canopy cover to human wellbeing, I have travelled the world seeking out best and worst practice. In all those trips, I have never seen anything like the industrial-scale street tree felling that is happening in Sheffield. From my multiple visits in 2015 and this year, I have witnessed Sheffield City Council failing to properly consult with the local community; ignoring many of the recommendations from its own Independent Tree Panel; not providing any independent technical tree support for its decisions; and felling thousands of healthy trees with no credible justification. Indeed, Canadian tree expert, Philip van Wassenauer, in a recent visit to review the situation with BBC naturalist Chris Packham, neatly summed it up: "After looking at dozens of trees scheduled to be felled in many locations, I didn't see one that had a good arboricultural reason for removal. In Canada, the goal of Urban Forestry is to have large stature, full-canopied trees. Sheffield has just those trees but is now cutting them down. It's hard to fathom!"

Throughout the PFI contract, SCC has persistently and consistently misused tree and highway technical arguments to justify the felling of healthy trees. Typical sweeping statements include the trees are mature and at the end of their lives; it is good management to regularly fell and replace trees to create an uneven age class structure; roots are causing highway damage and the only option is to fell; replacing felled street trees in locations more remote from people is appropriate mitigation; trees make pollution worse; and, the heritage value of old trees can be replicated by planting new ones. All intuitively and technically questionable, but challenging to refute, due to a lack of easily accessible and academically endorsed references.

Against the background of the ongoing Sheffield fellings, the real prospect of similar regimes being implemented in other UK cities, and the emerging government interest in street trees, it would greatly assist putting the case for improving canopy cover management if research and best practice

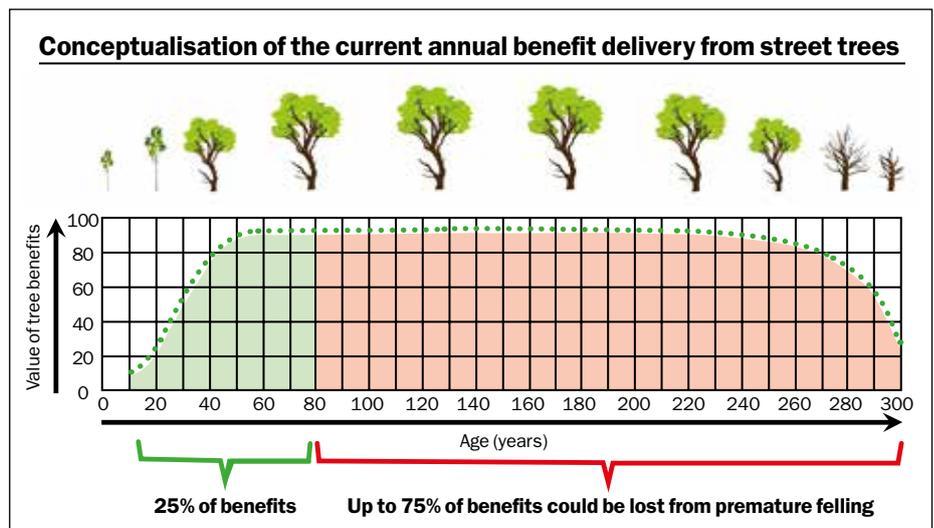


Figure 1: Research is needed to establish if up to 75% of the benefit delivery from long-lived urban street trees could be lost through premature felling at around 80 years, as being implemented in Sheffield

was identified and collated to make it more easily accessible, particularly in the following areas:

- The extent and timescales of benefit delivery: SCC repeatedly asserted that 80-100-year-old trees were mature, and it was good management to fell and replace. Fine for forestry where the objective is timber (trunk) production, but not even remotely correct in an urban context where the tree crown imparts most of the benefits. Maturity is where trees begin to deliver maximum benefits, and it can often last half to two-thirds of the life of the tree. Figure 1 (above) shows a simplistic conceptualisation of how benefit delivery might look, but it needs research and refinement to develop its academic credentials.
- Expected life spans for common species in urban conditions: On the Sheffield streets, I saw plane, sycamore, lime, and horse chestnut, with the odd oak and elm; all species documented with the ability to survive at least 200-300 years, if not longer. Most had the potential to be retained for many decades and possibly centuries with the right management, and



ICF Fellow Jeremy Barrell's comments are from his own professional interest

yet SCC consistently advocated such trees were at the end of their useful life.

■ A protocol for decision making where conflicts arise between trees and other infrastructure: Conventional built-environment management has consistently looked at tree costs without accounting for the value of tree benefits, and that unbalanced equation has driven the worldwide trend of decreasing urban canopy cover. Sustainable urban management must factor tree value into the decision-making process and yet SCC consistently failed to do this, constantly quoting highway repair costs in isolation from tree benefits.

Time to do more

In many ways, the tactics used in Sheffield has caught the arboriculture sector unawares because the scale of felling is unique and there has never been an historic need to react to such fake news/propaganda. Initially, it took several years before the full implications of the regime became apparent. But, even when the alarm was raised, enthusiasts and professionals alike were on the back foot trying to find and collate counters to obviously incorrect assertions and that largely remains the case today, five years into the programme. This experience has usefully raised awareness of the issues, but it also highlights the urgent need to develop credible professional responses to assist in robustly challenging the political misuse of technical tree information in the future.

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1. Sir William Worsley was appointed in June. See page 6.