

THE CASE FOR BIG TREES IN TOWNS

Chris Baines

The case for big trees in towns seems to be self-evident common sense. If we are caught in a downpour, we shelter under the nearest big tree; if sweltering in the mid-day sun, we seek out dappled shade. When the smell and stress of the traffic-congested high street gets too much, we know that the natural antidote is a few minutes in the peaceful green surroundings of the local park, where the air smells cleaner and the atmosphere is calming. In an age when so many streets have identical shop fronts and street furniture, big trees enhance the local character. Homes in tree-lined avenues command the highest prices. When it comes to nature on the doorstep, of all the garden birds that feed outside the kitchen window, wrens, robins, blackbirds and thrushes are probably the most musical, woodpeckers and nuthatches the most thrilling, sparrow hawks and tawny owls the most impressive - and all of them need big trees in their territories.

These are all compelling arguments for more big trees in towns. Nevertheless we are losing our legacy of large established trees at an alarming rate whilst failing to plant new trees with the capacity to tower above the rooftops. Why?

There is no doubt that our Victorian legacy of urban street trees is a victim of unforeseen circumstances. When they were planted, vehicles were still being drawn by horses, and buried gas and water pipes were still a novelty. Now those same trees have to contend with ground-shaking heavy trucks and busses, sealed surfaces that exclude air and moisture from their root-zone, chemical pollution on an unprecedented scale and a spaghetti of pipes and cables that leaves very little space for living roots. No wonder the trees are struggling to survive.

Misplaced risk aversion is proving to be the final nail in the coffin of many big urban trees. Whilst we shrug our collective shoulders at the annual death toll caused by traffic accidents, the mere suggestion that an overhanging branch may some day fall, with fatal consequences, is enough to let loose the loppers and toppers. Even when the best of arboricultural techniques have been employed, the canopy of a big tree tends to be dramatically diminished and its positive contribution to environmental quality is severely compromised. In many cases councils choose the easier option of outright removal. It costs less to cut down trees than to provide continuing care. What is more, because the attrition is incremental, with occasional big trees disappearing here and there, year after year, it seems the general public hardly notices.

Planting new trees in towns is popular – indeed it is quite often employed as a simple substitute for more demanding environmental action. However, the species planted are rarely those which will provide town dwellers of the 22nd century with a high canopy urban forest. Communication is part of the problem. To arborists the term “big tree” may imply a substantial forest scale species such as oak and beech, chestnut and lime, but in the short-term world of urban regeneration and local authority politics, “big tree” refers to the size at

the time of purchase and is generally assumed to be expensive advanced nursery stock. A “big” five metre specimen is quite likely to be a modestly sized species such as a flowering cherry, crab apple, thorn or birch. To make matters worse, even when a potentially huge species such as a plane or lime is planted as an expensive extra heavy standard, the shock of transplanting, the reluctance to prune, the confined root space and the inadequate aftercare will almost always mean that the tree stagnates. It generally loses its juvenile vigour and will often struggle to grow much bigger than its nursery size.

Large-growing trees can be compatible with city spaces, but success depends on combining a range of positive interventions. Some are technical and some are strategic. Attention to the root zone is essential. Big trees need room for their roots to spread, ideally well beyond the canopy of the branches. Therefore the tradition of providing deep but confined planting pits is inappropriate. There is a need to engineer an extensive rooting zone immediately beneath the surface of the paving, and new products such as the *deeproot* structural support system are promising to make this more achievable. The substrate in the rooting zone needs to have good mechanical strength to encourage secure anchorage, and it needs to contain both air and moisture, so a porous surface combined with good drainage is desirable. Mycorrhizal inoculation, non residual chemicals for weed control, avoidance of salt in road de-icing, trenchless tunnelling and the use of subsurface irrigation are just a few of the other technical refinements that can increase the success of large scale urban trees in cramped surroundings. Using young nursery stock and aggressively pruning lateral branches at the time of planting can help nursery grown trees to maintain juvenile vigour and produce strong and sustained apical growth – but this is not common practice in the UK.

There is a need to plan strategically if we are to achieve some continuity in the large tree canopy cover of our urban forests. In the case of existing mature trees this strategic approach should extend to traffic planning which restricts access to tree-lined avenues for heavy and high-sided vehicles, requires the use of trenchless tunnelling and shared space for underground utilities access and employs porous surface treatments to achieve water and oxygen penetration. In the longer term, and especially in new urban regeneration zones, there is a need to create spaces which are big enough for large-growing trees to be given priority in perpetuity. It may be difficult to fit big trees into the busy streetscape of the future and the shrinking size of private gardens makes them much less suitable for growing sizable boundary trees. Therefore there is a need to plan strategically for open spaces where the trees will have plenty of room to grow and spread.

All of this can be achieved once we begin to take our big trees seriously. We are entering a period of considerable reshaping and regeneration across urban Britain, and strategic intervention on behalf of big trees is extremely timely. Success will inevitably involve innovation, inconvenience and expense. It will not be easy to achieve. However, there is considerable social, economic and environmental value in the multifunctional benefits that big trees can bring. Healthy living, local distinctiveness enhanced property value and greater economic prosperity can be combined to make a persuasive case for more and bigger trees in Britain’s towns.

12 June 2008