SUSTAINABLE MANAGEMENT OF THE URBAN FOREST

FEATURE

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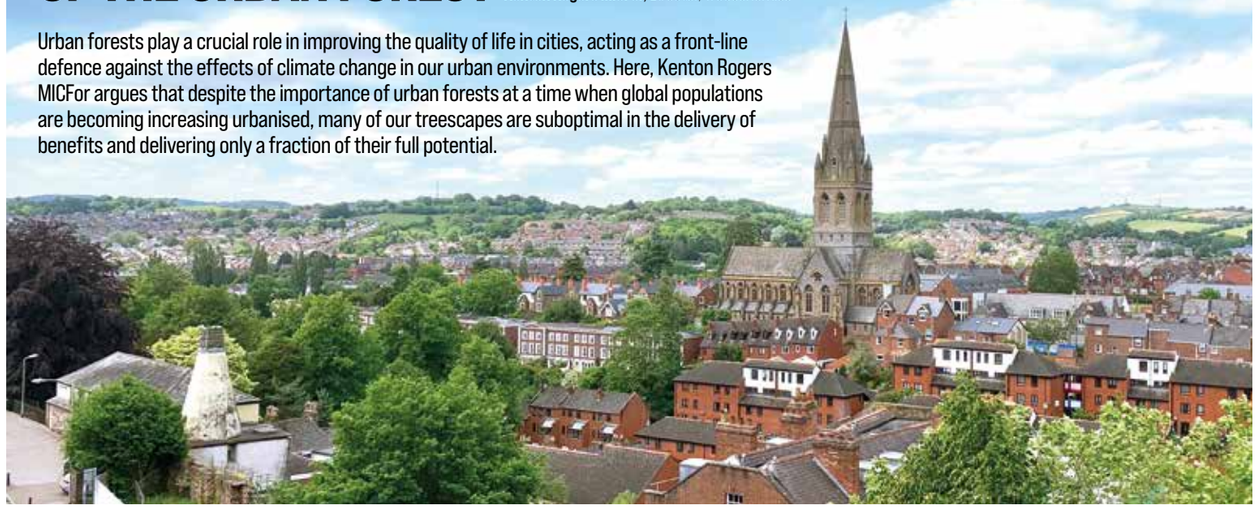
Urban forests play a crucial role in improving the quality of life in cities, acting as a front-line defence against the effects of climate change in our urban environments. Here, Kenton Rogers MICFor argues that despite the importance of urban forests at a time when global populations are becoming increasing urbanised, many of our treescapes are suboptimal in the delivery of benefits and delivering only a fraction of their full potential.



It is commonly understood that the trees which make up our urban forests are under threat. And, whilst many would cite that this is mainly due to rapid urban sprawl and development, land use changes and the many and varied effects of climate change, by far the biggest threat is lack of proper governance and management.

To highlight this point, a key finding of the 2005 *Trees in Towns II* study[1] was that 67% of urban forests in the UK had no proactive management. A more recent study from 2022[2] found that only 41% of local authorities have a publicly-accessible tree strategy. So, very little change in the last 20 years.

If we ever want to preserve and enhance our urban forests, an approach to management that includes strategy, planning, community engagement, auditing and governance, is essential. Because without this there is no funding, enforcement, long-term shared vision, or plan for positive change.

The good news, however, is that there is an ever-growing plethora of good and freely-available information about planning and managing tree populations and the urban forest. Although navigating through all of this information can be time-consuming and overwhelming, which can actually be a disincentive to taking action.

As an urban-focused Chartered Forester, with a background in traditional forestry, part of my role is to use my experience to help those managing urban treescapes to develop comprehensive tree strategies and urban forest plans that look at both the longer term and the bigger picture. This is often the norm in forest management plans.

In this article, I will briefly delve into some of the various components of a sustainable approach and explore how they can work together to achieve sustainable urban forest management.

Have a plan
A well-defined plan is the foundation of any successful urban forest management programme. The plan should provide a road map to achieving a shared vision, long-term goals and objectives.

The plan should focus on:

A
SETTING CLEAR OBJECTIVES
Defining what you aim to achieve with the urban forest is the first step. This could include goals like increasing tree canopy cover, enhancing biodiversity, or improving air quality.

B
IDENTIFYING KEY STAKEHOLDERS
Engaging a diverse group of stakeholders, including government agencies, the community, and environmental groups, is crucial.

C
ENGAGING WITH STAKEHOLDERS
Essential if you want 'buy in' to subsequent strategies and initiatives. If plans are developed 'with' people rather than just delivered 'to' people, there will be much greater acceptance and uptake.

D
RESOURCE ALLOCATION
Identifying the financial and human resources required to execute the next steps is essential. This could include budgeting for tree planting, maintenance, and other initiatives.

Develop a comprehensive tree strategy or urban forest master plan
Once an initial plan is in place, the next step is to develop a comprehensive tree strategy or urban forest master plan. This should be tailored to the specific needs and conditions of the city, and ideally should be developed as an iterative process with stakeholders, to co-develop the objectives, assess the current state of affairs, create measurable targets, and formulate time-bound actions. As an example, the 37 KPIs developed for the Birmingham Urban Forest Master Plan is shown in Figure 1.

Community Engagement
Involving the community in urban forest management is probably the most important factor in ensuring the long-term success of any initiative. Engaged residents are more likely to support and protect urban trees. And again, for success this needs consultation and collaboration from the outset. Ask the public how they feel about 'their' trees in the places they live – do they feel a tree strategy is necessary? Do they think there are too few or too many trees in their community?

For the comprehensive Belfast Tree and Woodland Strategy, this initial consultation was crucial, not only to show there was overwhelming support for a strategy, but also to highlight that too often those managing trees only hear from the public about the bad stuff. This gives a skewed perception that trees are generally perceived as a nuisance when in fact, in Belfast at least, there was huge support for trees and a strategy to support them, with 93% of (a total of 606) respondents to the public consultation expressing that they 'loved' the trees in their locality.

Governance
Effective governance is crucial for the sustainable management of urban forests. This involves establishing clear roles, responsibilities, and decision-making processes. Key aspects of governance include:

A **POLICY DEVELOPMENT**
Create and update policies and regulations that support urban forest management, including tree protection ordinances and land use planning.

B **FUNDING MECHANISMS**
Develop sustainable funding sources for urban forest programmes, such as dedicated budgets, grants, and partnerships with private organisations.

C **COLLABORATION**
Foster collaboration between different government departments, non-profit organisations, and the private sector to ensure a holistic approach to urban forest management.

Figure 1

	TARGETS
TREES AND URBAN FOREST STRUCTURE	T01 Relative tree canopy cover T02 Age diversity T03 Species diversity T04 Species sustainability (including allergenicity and ecosystem disservices) T05 Publicly owned trees (trees managed "intensively") T06 Publicly owned natural areas (trees managed "extensively") T07 Trees on private property T08 Other elements of the urban forest; shrubs, hedges, green walls and roofs, plants, animals and water T09 Tree benefits (including biodiversity) T10 Wider environment considerations (including climate change, air quality and water)
COMMUNITY FRAMEWORK	C01 Governance and leadership C02 Birmingham Council departmental cooperation C03 Utilities cooperation C04 Green industry cooperation C05 Involvement of large private and institutional landholders C06 Community involvement and neighbourhood action C07 General appreciation of trees as a community resource C08 Regional collaboration C09 International reputation
SUSTAINABLE RESOURCE MANAGEMENT APPROACH	R01 Tree inventory R02 Tree valuation and asset management approach R03 Canopy cover assessment and goals R04 Environmental justice, cultural values and equity (links to C06) R05 Reviewing and improving the urban forest masterplan R06 Urban forestry funding R07 Urban forestry program capacity and staffing R08 Tree establishment planning and implementation R09 Growing site suitability R10 Tree protection policy development and enforcement R11 Maintenance of publicly owned "intensively" managed trees R12 Maintenance of publicly owned natural "extensively" managed areas R13 Tree risk management R14 Biosecurity R15 Urban wood and green waste utilisation R16 Native vegetation R17 Research and development R18 Open urban forest data and web-map (management and assessment tools)

There are, of course, many other steps to consider (far too many to go into detail here) such as auditing, funding, outreach, education and timber utilisation. The important thing to remember with this, and indeed any other guidance (see Further Resources) is that it is there to support decision-making. It does not have to be rigidly followed, everywhere is different and neither is it a shortcut to thinking, something to be blindly followed.

Sustainable management of the urban forest requires a multifaceted approach that includes strategy, planning, community engagement, auditing, and governance. That's a lot to put together, which is why truly collaborative approaches are needed to make them work (such as in Belfast and Birmingham). When these elements are integrated into a comprehensive programme of works, cities can enjoy the numerous benefits of a healthy urban forest and can work toward preserving and enhancing their urban forests for current and future generations.

If you have any questions or comments on this article, you can contact Kenton via **kenton@treeconomics.co.uk**

Further Resources
Birmingham's Urban Forest Master Plan **treeconomics.co.uk/reports/birmingham-urban-forest-master-plan**

The Sustainable Urban Forest **fao.org/sustainable-forest-management/toolbox/tools/tool-detail/en/c/472218**

TDAG – Trees in the TownScape, Trees, Planning and Development and Trees, Planning and Development: A Guide for Delivery **tdag.org**

The Tree Council – A Trees and Woodland Strategy Toolkit for Local Authorities **treecouncil.org.uk/what-we-do/science-and-research/tree-strategies/**

The Urban Forest Management Toolbox **ufmptoolkit.net**

Reference
[1] Britt and Johnston (2005)
[2] Kathryn L. Hand, Harriet Rix, Jon Stokes & Kieron J. Doick (2022) The creation, content and use of urban tree strategies by English local governments, *Arboricultural Journal*, 44:4, 183-207, DOI: 10.1080/03071375.2022.2072623