

# Building Resilience in Scotland's Urban Tree Populations

Andy J Moffat

July 2015

## Executive Summary

Trees are an integral part of the landscape of Scottish towns and cities, with many planted in Victorian times. Increasingly, urban trees are recognised for the value they give, not just for amenity but for other 'ecosystem services' such as noise and pollution abatement, shade, cooling and carbon sequestration. Yet, as in other parts of Britain, urban tree populations in Scotland are declining as a result of development, tree pests and diseases, and other pressures from modern living.

The results of this small study reveal that whilst city tree officers are aware of the potential threat that predicted climate change presents to city trees, the main drivers for changing practice are the ageing tree populations, the threat of litigation and the impact of pests and diseases. Nevertheless, responses to these threats also serve to build resilience to climate change through tree species diversification, the planting of young tree stock and an elevated understanding of the importance of trees amongst city populations. Re-use of woody biomass wastes for bioenergy also generates valuable income for tree work.



This report examines the current position of urban tree management and the extent to which climate change resilience is being addressed. It explores the current position in six of the seven Scottish city authorities on their responsiveness to the need for climate change adaptation and resilience building through interviews with their arboricultural and greenspace officers. It also offers reflections on how policy support for the arboricultural and urban forestry sector can be more effective in future. The study also identified several constraints to more effective adaptation. The most important of which was judged to be the reduction in core funding that many local authorities have experienced in recent years. A lack of appreciation of the range of benefits that trees bring to city dwellers by both political leaders and significant elements of the general public is also restricting the ability of tree officers to build resilience. There is considerable potential for city arboricultural officers to



Scotland's centre of expertise connecting  
climate change research and policy

communicate effectively with their colleagues, with elected members and the wider community to raise awareness of the wide range of benefits that city trees can bring. Tools like i-Tree<sup>1</sup> offer considerable promise in this respect.

The full report of this study can be downloaded from the ClimateXChange website – <http://www.climateexchange.org.uk/adapting-to-climate-change/building-resilience-scotlands-urban-tree-populations/>

<sup>1</sup> <https://www.itreetools.org/>

ClimateXChange is Scotland's Centre of Expertise on Climate Change, supporting the Scottish Government's policy development on climate change mitigation, adaptation and the transition to a low carbon economy. The centre delivers objective, independent, integrated and authoritative evidence in response to clearly specified policy questions.