

# VALUING DUDLEY'S URBAN FOREST



**Most Common Tree Species:  
Hawthorn, English Oak and Ash**

Urban forests provide people with a range of benefits (or ecosystem services) that help make our towns and cities better places to live.

Trees filter air pollution, improve our health, store carbon and reduce flooding, whilst also providing important habitat for wildlife and a multitude of other benefits.

Black Country Consortium Ltd worked in partnership with Birmingham Tree People, Barton Hyett Associates and Treeconomics to survey the trees in Dudley. Using a plot sample assessment in i-Tree Eco the structure of Dudley's urban forest was assessed and a range of the ecosystem services it provides to society were valued.

**The replacement cost\*  
of Dudley's Urban Forest  
is £334 Million**

\*Replacement cost refers to the CTLA Valuation, and does not account for the health or amenity value.

**Number of Trees  
590,000**

**17%  
Tree Cover**

**88  
Tree Species**

**60  
Trees per hectare**

Dudley's urban forest contains an estimated 590,000 trees benefiting over 313,000 people. That's almost 2 trees per person.

In addition, Dudley's trees:

-  Cover an area equivalent to 1,665 ha with a leaf area of 9,290 ha.
-  Intercept around 162,000 m<sup>3</sup> of rain water every year, equivalent to an estimated £159,000 in avoided water treatment costs.
-  Filter 17.6 tonnes of airborne pollutants each year, worth over £1 million.
-  Remove an estimated 5,870 tonnes of carbon from the atmosphere each year, worth £5.3 million.
-  Store an impressive 174,000 tonnes of carbon worth £158 million.
-  Are at risk from pests and diseases - Ash dieback could affect 55,000 trees in Dudley.

-  Leaf area is equivalent to 774 times the area of Buckpool and Fens Pools Nature reserve (12 ha)!
-  Avoided runoff is equivalent to 65 olympic swimming pools of water!
-  Carbon sequestration is equivalent to the annual CO<sub>2</sub> emissions of 12,410 cars!
-  Carbon storage is equivalent to the weight of 14,000 new London double-decker busses (12.4 tonnes)!