London iTree headline results

i-Tree is a recognised method of valuing the ecosystem service benefits that trees provide. It was devised in the US and has been used throughout the world. In 2014 London carried out the largest iTree urban forest survey of a city region in the world, using over 300 volunteers who surveyed over 700 random plots across the city.

The iTree report gives us a much better understanding of the structure and value of London's urban forest, enabling us to make better plans to manage London's trees. The headline results of the survey are listed below.

The full report will be available on the Forestry Commission website on 2 December 2015: www.forestry.gov.uk/london-itree

The iTree report is a partnership project including Forestry Commission, Greater London Authority, London Tree Officers Association, Trees for Cities, Tree Council, Natural England and Treeconomics. Unilever sponsored production of the iTree report as part of the programme For the Love of Trees – London.

London's Urban Forest – Key Statistics

Number of trees	8,421,000	
Canopy Cover	21%	
Most Common Species	Inner London: Birch, Lime, Apple	
	Outer London: Sycamore, Oak, Hawthorn	
Pollution removal (per annum)	2241 tonnes	£ 126.1 million
Stormwater Alleviation (per annum)	3,414,000 m3	£2.8 million
Carbon Storage (whole value)	2,367,000 tonnes	£146.9 million
Carbon sequestration (per annum)	77,200 tonnes	£4.79 million
Replacement Cost (whole value)	£6.12 billion	
TOTAL ANNUAL BENEFITS	£ 132.7 million	

Notes

Number of trees: Total number of estimated trees extrapolated from the sample plots.

Most common species is based on field observations.

Pollution removal value is calculated based on the UK social damage costs (UKSDC) and the US externality prices (USEC) where UK figures are not available;

For Inner London these were; £927 per metric ton CO (carbon monoxide - USEC), £6528 per metric ton O_3 (ozone - USEC), £98,907 per metric ton NO_4 (nitrogen dioxide - UKSDC), £1633 per metric ton SO_2 (sulphur dioxide - USEC), £273,193 per metric ton PM10 (Particulate matter less than 10 microns and greater than 2.5 microns - UKSDC), £7482 per metric ton PM2.5 (particulate matter less than 2.5 microns - USEC).

For Outer London these were; £927 per metric ton CO (carbon monoxide - USEC), £6528 per metric ton O_3 (ozone - USEC), £64,605 per metric ton NO_4 (nitrogen dioxide - UKSDC), £1633 per metric ton SO_2 (sulphur dioxide - USEC), £178,447 per metric ton PM10 (Particulate matter less than 10 microns and greater than 2.5 microns - UKSDC), £7482 per metric ton PM2.5 (particulate matter less than 2.5 microns - USEC).

Stormwater Alleviation is based on the amount of water held in the tree canopy and re-evaporated after the rainfall event (avoided runoff). The value is based on the Thames Water volumetric charge of £0.807p per cubic metre.

Carbon Storage: the amount of carbon bound up in the above-ground and below-ground parts of woody vegetation.

Carbon sequestration: the removal of carbon dioxide from the air by plants.

Carbon storage and carbon sequestration values are calculated based on 2015 DECC figures of £62 per metric ton.

Replacement Cost: is the value of the trees based on the physical resource itself (e.g., the cost of having to replace a tree with a similar tree).

Further details are found within the relevant chapters of the report and a summary of the calculations is included within appendix V.