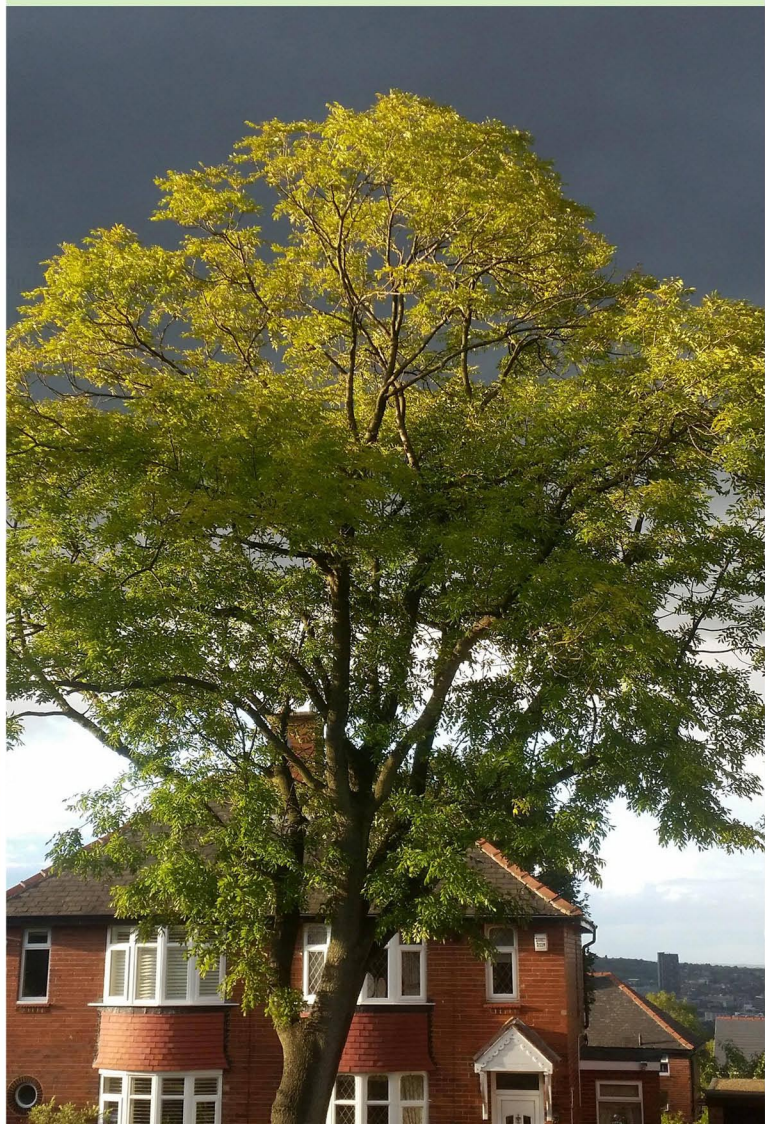


# 12

## reasons to love street trees



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**A printable version of this leaflet can be downloaded from the 'Campaign Leaflets' page**

### **We need trees to help us breathe**

Although the greater amount of oxygen is released by marine algae, trees and other land plants produce around a quarter of the planet's oxygen. On average it takes 7 or 8 mature trees to produce enough oxygen for each human every year. Trees play a key role in the atmospheric cycle and they actually affect the weather through the gases they release.

### **Trees store carbon dioxide**

Planting trees is an easy and cost effective way to remove climate-warming carbon dioxide from the atmosphere. As trees grow they combine carbon molecules with water to produce energy rich carbohydrates, locking away carbon for decades, or even centuries, if the timber is used to create lasting items such as building materials and furniture.

### **Air pollution can be captured by trees**

In 2016, 40,000 premature deaths were linked to air pollution across the UK. In Sheffield, air pollution is thought to contribute to 500 deaths every year. A Lancaster University study has shown that roadside trees can cut the amount of roadside pollution entering homes by 50 percent. Larger trees have greater air-cleaning potential: ones with a girth of 77cm may be 70 times more effective at removing pollution than ones measuring 8 cm.

### **Trees support wildlife**

Trees provide shelter and food for a broad range of animals. They contribute to a diverse and healthy insect population which, although small in size, are the major component of many ecosystems. Bees and other insects are attracted by tree-flower nectar; birds and bats then feast on these insects. Tree fruits and nuts also attract other birds and animals. Most of this happens high above ground level, away from the noisy humans that can otherwise scare wildlife away.





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### Trees can help conserve energy

Growing a tree in the optimum spot next to a building casts shade and lowers air temperature, reducing the need for air-conditioning in warm weather. Trees planted as windbreaks, particularly evergreens, can soften the impact of cold winds, lowering a building's heating requirements and reducing energy consumption.

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### Built-up areas can be cooled by trees

Many cities experience the 'urban heat island effect', where the manmade landscape absorbs far more heat from the sun than the surrounding rural area. First: trees cool the air under their boughs by blocking sunlight; second: as trees transpire, moisture evaporating from the leaf surface has an additional cooling effect. Planting just 10 percent more trees in our cities could reduce urban temperatures by 3-4°C, which will become increasingly important as the climate warms.

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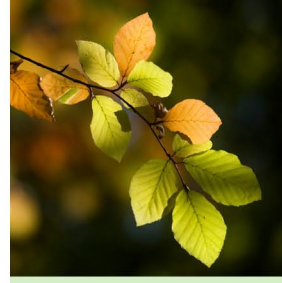
### Trees reduce stormwater run-off & slow soil erosion

Urban drainage systems are frequently overwhelmed by heavy downpours of rain. Strategically placed trees can ease the burden in various ways. Tree roots stabilise soil and prevent it from being washed into drains and waterways, where it combines with other debris to create blockages that bring an increased risk of surface flooding. Tree roots take up stormwater run-off, slowing down the rate at which it enters rivers. The water is also cleaner because trees actually remove pollutants and convert them into less toxic substances. For every 5 percent increase in tree cover stormwater run-off is cut by 2 percent.

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### Intrusive noise can be disguised by tree sounds

Noise from traffic and other manmade sources can be offset by tree sounds. Rustling leaves and bird song have been shown to soften the impact of intrusive urban sounds and a well-situated tree can reduce noise nuisance by up to 40 percent.



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### Trees improve health & wellbeing

Easy access to nature contributes to positive health and wellbeing; for many people the trees outside their home are their primary contact with nature. A highly rated study has shown that living in a tree-lined street gives the same health improvement as being 7 years younger. Other research has shown that the positive effects of being among trees can last for up to 7 hours. The Japanese have embraced this principle and 'forest bathing' is a recommended therapeutic technique.

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### Trees make streets safer, for people & for play

Vehicles travel more slowly on tree-lined streets, making roads safer for pedestrians. This encourages more journeys on foot and an increased pedestrian presence discourages some types of crime. It has also been noted that trees close to home create better play opportunities for children.

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### House prices are positively linked with trees

Trees have such strong aesthetic appeal that having them next to your home actually increases the property value. Broadleaved trees have the greatest impact; they have been found to add between 5 and 18 percent to a house's value.

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### Trees contribute to thriving retail areas

Findings show that high-street shopping areas with trees benefit from more sales and attract more investment. This is because trees create spaces where people prefer to gather and spend more time. Unhurried customers translate into an increased volume of sales, which helps support the local economy.