

The benefits of shade trees

EarthFirst

by Neil Jones, ECCO

The benefits of shade trees and tree-lined streetscapes could not have been more obvious than during the past few weeks of searing temperatures. Orange has recently experienced some very hot temperatures, and lingering heat during the evenings. Few could dispute the value of our towns magnificent shade-producing trees in the streets, parks and gardens. A drive along Sampson or Anson Streets under the full canopy of Plane trees, where the road bitumen surface and footpaths are shaded, highlights the cooling benefits of tree lined streetscapes.

Similarly, a drive or walk around the leafy garden suburb of Westlea, with modest homes carefully located on blocks of land that have room for large trees in front and backyards, and on nature strips, further highlights the positive role urban landscapes can play in mitigating against the impact of high temperatures. Strategically located neighbourhood parks with a mix of evergreen native trees and deciduous species are also important in cooling our suburbs. Contrast this with searing temperatures experienced in treeless carparks around town, unshaded footpaths, streetscapes with inadequate mature trees, and homes in new residential areas devoid of shade trees, and the benefits are obvious.

The role that shade trees can play in reducing the impact of high temperatures on our daily lives either in our homes or workplaces, or where we shop or play is only one of many environmental and socio-economic benefits of green urban landscapes.

Environmental benefits of trees

- Temperature decrease – Plants reflect the sun's radiation, providing shade and cooling through transpiration.
- Reduced energy use in buildings – Trees shade roof-tops and walls, and insulate buildings from the sun's heat.
- Carbon sequestration – Trees and shrubs absorb and sequester carbon emissions.
- Pollution filter – Foliage traps air particles containing dust, and hydrocarbons from exhaust fumes.
- Soil stability – Trees and shrubs reduce soil erosion.
- Biodiversity – Provide habitat for birds, frogs, possums and insects.
- Water retention – Trees and shrubs reduce stormwater run-off.

Socio-economic benefits of trees

- Physical health – Reduced heat stress and reduced respiratory illness.
- Mental health – Green garden environments promote wellbeing at home and at work.
- Tourism – A leafy green city will attract more visitors – that will stay longer.

While the 'death of the Aussie backyard' poses a real threat to the greening of our urban residential areas, the provision of urban green space becomes increasingly important. It is vital that we, as a community, recognise and understand the full range and value of services

that trees provide in public streets, carparks, neighbourhood parks, recreation areas, gardens and open spaces.

To beat the heat next summer, think about what shade producing trees, climbers or shrubs you can plant this year.

Green tip for the week

Add water crystals to the soil when planting shrubs and trees. This will help the plant get established, prevent the roots from drying out, and reduce the need for unnecessary watering.

Next event

Clean up Australia Day – March 7. Stay tuned for more details.