



# The Tree Council's Tree Care Campaign

21<sup>st</sup> March to 21<sup>st</sup> September

## Tree Survival in Drought

If water is in short supply, ensure that the trees that are likely to need it most are your first priority. They are:

- Newly planted and other young trees which have limited roots, or roots that have not developed yet. Such trees often need water anyway, but in dry conditions it is essential. When a new street tree is planted, a watering pipe is sometimes installed so that it sticks up alongside. Use this to get water deep under the tree
- Trees planted where there is limited soil surface area around the tree and few other nearby places for water to soak into the ground – such as in pavements or car parks

## Spotting a tree with drought stress

The signs of drought stress vary according to tree species, but some common early signs are:

- Foliage wilting during the day, but recovering at night
- Older leaves and needles looking brown, faded or yellow
- Leaves curling at the edges, or with brown blotching, brown edges or brown between the veins
- Leaves dropping prematurely, or appearing brown and shrivelled

If drought conditions last, symptoms can become more extreme including:

- Many or all leaves turning brown and shrivelled
- Whole shoots or branches dying back
- The canopy appearing to have thinned because many leaves and branches have died
- Splits appearing in the bark

Another telltale sign is if the soil around the tree becomes cracked and split.

## Top 10 tips for watering trees in a drought

1. Trees should be watered three times a month from April until the end of September. When possible avoid evaporation by watering early or late, not in the middle of the day.
2. Water slowly, to ensure that the water does not run off. The ground will probably be hard and it will take time for the water to permeate through the surface, so especially to begin with, water slowly and thoroughly.
3. Estimating the amount of water that a tree needs is difficult. A useful rule of thumb is a full watering can or five minutes with a hose, per 2.5cm/1in of trunk diameter at knee height.
4. Inadequate watering, which only wets the surface of the ground, can cause surface roots to grow and this could lead to more drought problems if the watering stops.
5. Concentrate efforts under the canopy of the tree, as this is where most of the roots are likely to be. Ensure that you water evenly so that no matter where the roots are, they get some water.
6. Don't concentrate all your watering around the base of the trunk, as most of the roots are likely to be further out.
7. To ensure the soil retains water, use mulch extensively around trees in a circle of at least 1m/3ft radius and to a depth of 10cm/4in. Use wood chips, shredded bark, leaves or evergreen needles as mulch. Make sure that the mulch is not touching the trunk.
8. If you use a watering can or hose, attach a watering rose to slow down the speed of watering and ensure the water doesn't run off. Alternatively, use a perforated hose and lay it around the tree under the canopy. Again, five minutes watering per 2.5cm/1in of stem diameter.
9. Another option is to drill 7mm/¼ in holes in a bucket or watering can, and then stand it under the tree, so that the water drains out slowly into the soil.
10. Re-use "grey" water (such as bath water, but not dishwasher water because of the salt) whenever possible or collect any rain water from gutters in water butts.