

Watering your tree

Forestry Services

Newly Planted Trees

A 50 mm (2") diameter tree needs a minimum of 130 litres (30 gallons) of water per week (this is approximately the amount held by six kitchen sinks). The best way to ensure that the water applied to the tree actually penetrates the rootball, is to maintain the earth ring or saucer that was placed when your tree was planted. If you are able to water using a soaker hose or slow drip, give the tree a minimum of two hour's worth of water. For just over 50¢ per month in water, you can ensure the survival of your new tree. During a week when it rains two or more days, watering is not necessary. Watering should continue until the first frost, usually around the beginning of October. At that time, one final soaking should get your tree through the winter.

The most common reason for poor survival of new trees is inconsistent watering. If you plan to take holidays away from home, please ask a neighbour to water while you are gone. Regular watering will greatly improve the tree's health and appearance during this critical establishment period.

Mature Trees

A tree that has been planted for 15 years or more may appear to be able to fend for itself under any condition. At this point in a tree's development, its root system has spread out away from the trunk and can reach water and nutrients even when surface conditions appear very dry. There is, however, a critical point during extended drought periods where the remaining soil moisture is so tightly held to soil particles that roots cannot use it. Trees of all ages suffer when extended drought conditions are experienced. As with humans, stress can make an otherwise healthy tree more susceptible to pathogens looking for weakness. Extra water to all trees during a drought, regardless of age, can keep defenses strong against invading insects or disease. Let the garden hose run at a trickle for several hours or if possible, overnight.

Water stress happens very quickly for trees planted in difficult areas such as sidewalks, patios, or raised lawns where water naturally drains away. Trees in these situations should be helped with an overnight soaking three times a week through the hottest part of the summer. For under \$2.00 per month you can give your tree approximately 550 litres (120 gallons) of water.

Trees Near Foundations

During very dry weather, soil particles will "lock up" water molecules at a threshold level. This is especially true of clay soil particles, which have very strong electrical charges and therefore, hold water very tightly. This is the beginning of a battle between soil particles and roots for water uptake. Clay soils will actually shrink in volume due to water loss, which reduces the soil's capacity to support adjacent structures such as foundations. Foundation damage from unstable clay soils may be avoided by ensuring that trees close to foundations are always well irrigated.

Again, the overnight trickle from a garden hose will help maintain the water balance necessary to keep clay-based soils stable. This should happen on a three times per week basis for as long as drought conditions persist.

For more information about watering your tree or to obtain the City of Ottawa's Trees and Foundation Damage brochure, please contact:

City of Ottawa
24-Hour Call Centre at 580-2400
e-mail to: forestry@ottawa.ca

