

Deep Root Fertilizing

Spring is sprung, the grass is riz, I wonder where the nutrients is? ~ a plausible quote from an urban tree.

Spring is well on its way and you may have noticed many broad-leaf trees coming into flower and leaf. This is the time when trees will be using stored energy reserves to initiate bud break, leaf and flower development as well as root growth.



With so much energy being used the tree needs to replace it quickly. In fact, the time of maximum nutrient uptake is from spring bud break through to fall colour change. Trees require certain essential elements as part of their metabolic processes. The most important of these is nitrogen, proteins and chlorophyll. Although in lesser quantities, trees also require phosphorus, potassium and sulphur.

Good undisturbed soil typically has a sufficient amount of all these elements. However, urban development often disturbs soil structure resulting in nutrient depleted soils and an interruption of the natural nutrient cycling process. Fertilizing a tree can reintroduce these missing nutrients back into the soil to stimulate tree growth and often reverse declining health.

Competition for nutrients can be intense in the top eight inches of soil where most of the root activity occurs. For trees that have grass growing in this area there can be up to 200 times more grass roots than tree roots. As a result, most topical fertilizers and irrigation benefit the grass rather than the tree.



To overcome this, arborists use a technique called Deep Root Fertilizing. This process injects a liquid solution of fertilizer 4-8 inches into the ground in a grid pattern concentrated around the drip line of the tree – home of the tree's nutrient absorbing roots. This method has the added benefit of introducing water and oxygen into the soil at the same time – critical for root growth and development.

So, if your tree is growing in urban soil and you have noticed a decrease in growth or perhaps even yellowing leaves then consider giving your tree a boost with deep root fertilizing. A word of caution, tree fertilizing can be a complex business and is linked to other factors such as soil pH. It is also possible that your tree's poor health is a symptom of a larger problem rather than simply being a nutrient deficiency.

Your best course of action is to contact your trusted *tree care professional* for a thorough assessment and accurate diagnosis of your tree's health.

