



Mother Nature's Moment • October | November 2017

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Fertilizing Facts and Fiction

This time of year we often receive calls from individuals requesting to have their trees fertilized. Fertilizing one's trees seems like such a good thing to do for them, and yet there are so many misconceptions about tree fertilizer that, as arborists, we often are trying to bring clarity to this area of tree care.

The first thing we need to understand about fertilizer, or the first fact, is that it is NOT tree food. ***Trees make their own food from the energy of the sun!!*** This is actually science we learned in the second grade but many of us have forgotten it, or at least, have forgotten the ramifications of that fact.

Right now the trees are engaged in a very important part of their annual rhythms. They are shedding their deciduous leaves and dropping all that nutrient rich biomass at their feet. Prior to shedding those leaves, they worked VERY hard all summer to use those leaves, *or food producers*, to create sugars from the sun's energy which they are now carefully storing in their woody tissues, and which they will use next spring to push out a whole ***new*** set of flowers and seeds and leaves/ food producers. By the time the tree needs the nutrients from last year's leaves, they have conveniently progressed in their decomposition and are releasing nutrients into the soil to be available for their parent tree to recycle all those hard won "fruits" from the year before. It takes loads of energy for the trees to increase their girth, make flowers and leaves each year and reproduce themselves in the form of seeds and



This weeping Crabtree has ample mulch area below it making the natural recycling of its leaves easy and the best way to fertilize. Photos by Lesley Bruce Smith



fruit. The leaves provide nitrogen and all kinds of complex micro-nutrients that are needed in the cycle of life to nurture the trees of the forest. But, that is just the kicker in our story. The forest environment and our lawn environment are two completely different “animals”.



This Riverbirch was designed into a landscape with lots of mulched bed area to allow easy recycling of its leaves and thus nutrients.

The forest and prairie environments of Northeast Illinois were/are some of the most fertile on earth. Gil has talked in past *Backyard Wisdom* articles about why that is the case, but the key to the continued fertility in our forests is the ability of the trees to recycle their nutrient rich leaf litter. So how does all this relate to our fertilizing our trees? Whenever we look to do good things for our trees, we should look no further than Mother Nature. She knows best, and in order to do the best we need only try to do like her as best we can. When it comes to fertilizing we follow some pretty basic rules to do the best we can for our trees.

- **The most effective form of tree fertilizer is mulching under the trees and allowing the leaves to recycle naturally.**
- Only fertilize trees that need it, we tend to over fertilize in our area.
- Don't add nitrogen rich fertilizer, or stimulate growth, just before the dormant season (August/September) because that new growth will not have a chance to harden off before the winter cold.
- We don't use fertilizers with high amounts of nitrogen because that sends the wrong signal to the trees, blasting them with natural unnatural amounts of nitrogen.
- Fertilizing our lawn is not fertilizing our trees.
- We usually fertilize in late spring and summer to give the trees access to nitrogen and micro-nutrients during their peak growing times, emphasizing acidification of the soil to help compensate for the loss of forest like soil conditions.
- **The most effective** form of tree fertilizer is **mulching** under the trees and allowing the leaves to recycle naturally... just needed to re-emphasize.

We have Arborsmith™ Abstracts on **Fertilizing and Mulching** which you may request.