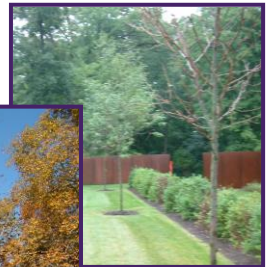


Giroud Fact Sheet: Tree Health Starts with the Roots

I. Problem

Oxygen, water, vitamins, nutrients and minerals, your tree needs all of these to thrive. Your tree's access to these life essentials can be damaged by poor soil, competition from lawns, girdling roots, drainage, construction and soil compaction. When this happens, your tree weakens and becomes vulnerable to health problems.

Late to leaf out



II. Symptoms

The following are warning signs:

- Dull foliage: The tree loses its lush, green color
- Poor leaf development: Leaves dying back from branch tips, dwarf leaves, late to leaf out in Spring, premature leaf drop in Fall
- Excessive deadwood and stunted growth
- Infestation by predatory pests and diseases such as borers
- Root decline that can make the tree unstable in high winds.



Premature leaf drop



Infestation by predatory pests

III. Treatment

Almost any tree can benefit from our targeted Root Treatments. The first step is for your Giroud Arborist to evaluate the condition of your tree. He may recommend one of the following actions:

1. **Fertilization—Annual Deep Root Feeding:** Done once a year, our time release formula with Bio-stimulants and Vitamin Complex replenishes essentials for healthy life that are lost to lawns and other plantings.
2. **Aeration:** Opens pathways to help the roots breathe by drilling narrow holes in the ground above the roots.
3. **Root Excavation:** Exposes the root system for evaluation of the root health and structure. It also enables us to examine/cut girdling roots and loosen the soil to help roots to breathe.
4. **Soil Testing:** Soil tests clearly show any soil problems that may be affecting your tree's health. We test for pH levels, nutrient and mineral content, and soil structure.
5. **Vertical Mulching:** Improves drainage so excess groundwater won't drown roots.
6. **Radial Trenching:** Promotes root development through aeration and compost.
7. **Soil Treatments:** To create the best growing conditions for your trees and build strong/stable roots; treatments are recommended for:
 - *Health Maintenance:* Annual deep root fertilization treatment
 - *New Plantings:* It's difficult for new trees to get established. Our "Healthy Start Fertilizer" with Mycorrhizae promotes root growth, lush leaf development and color and enables the roots to better absorb nutrients and water.
 - *Trees in Decline:* A soil test can help pinpoint the cause of decline. Treatment strategies include fertilizer, Mycorrhizae, specific micronutrients or other soil amendments.



Root treatments are customized to fit the needs of the tree.