



Improving Root Health

Though the magnificence of trees is experienced above ground, the most important aspect of tree health is below ground in the root system. Roots provide anchorage that allows for the absorption of water and nutrients. The urban landscape is not a tree's natural environment. They evolved over eons growing in forests, fields, and river bottoms. Tree roots have developed to grow in moist, well-drained soil rich in organic matter. Unfortunately, urban soils rarely exhibit any of these qualities. They are typically compacted, water holding, and heavy in clay composition. These characteristics are detrimental to root function; and therefore, negatively affect tree health.

What Can Be Done?

An Ahlum & Arbor Certified Arborist can inspect your landscape and determine if anything can be done to help improve conditions for your tree's benefit. Listed below are services we offer depending on your tree's specific needs.

Root Enhancement Service

This is performed utilizing a special tool that focuses a supersonic jet of compressed air for loosening and digging the soil around the root system without damaging the roots. This allows to not only de-compact the soil, but also to mix in organic material and create an environment that mimics the soil floor structure and make-up.

Root Aeration

During this process, the same 'air spade' tool would be used to loosen the compacted soil. Typically, this is done in a grid pattern under the tree's canopy and out past the drip line where most active feeder roots are growing. These fractures are backfilled with an organic matter to help improve soil composition and aeration.

Stem Girdling Roots

Water, nutrients, and food are conducted through a tree in the xylem and phloem vessels that lie just under the bark. These vessels can become constricted due to the presence of any impingement upon the bark surface. This can include rope or cable used to support the tree, twine used to hold the burlap of the ball in place, or an errant root that grows to circle the trunk rather than growing outward like a spoke in a wagon wheel. These roots are classified as "stem-girdling roots" and negatively affect tree health. Ahlum & Arbor Tree Preservation recommends removal of these roots when discovered. This process can be performed separately, or it can be included in the Root Enhancement or Root Aeration Service.

Good root systems lead to healthy, long lasting trees. Ensure healthy roots by having Ahlum & Arbor Tree Preservation perform a root care service for them today.



Stem-girdling roots (left and below)



Improperly mulched trees promote girdling roots (right)



Tree showing correct mulch depth exposing the root flare (above)



Stem-girdling roots (right)

Ahlum & Arbor Tree Preservation is a family-owned, full service arboricultural firm serving both Residential and commercial clients in central Ohio for over four decades. Ahlum & Arbor's staff includes Board Certified Master Arborist, ASCA Registered Consulting Arborist, Certified Arborist, ISA Tree Care Safety Professionals, State Licensed Pesticide Applicators and much more.

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