



Ahlum & Arbor
TREE PRESERVATION

Ahlum & Arbor Tree Preservation is a family-owned, full service arboricultural firm serving both residential and commercial clients in central Ohio for more than 30 years. Ahlum & Arbor's staff includes 13 certified arborists and 7 state licensed pesticide applicators.

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Improving Root Health

Though the magnificence of trees is experienced above ground, it is arguable that the most important aspect of tree health is below ground in the root system. Roots provide anchorage and 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. They must be corrected for the long term survivability of the tree.

What can be done?

Ahlum & Arbor Tree Preservation recommends correcting these problems through a Root Enhancement Service. Root Enhancement 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 us to not only de-compact the soil, but also to mix in organic material and create an environment that mimics the forest floor structure and make-up. This organic material contains the nutrients a tree needs.

- Pictures from left: Tree with cut roots*
- Left middle: Tech cutting Root*
- Right middle: Large girdling root on surface*
- Right: Tree planted too deeply with girdling roots.*

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 very negatively affect tree health. Ahlum & Arbor Tree Preservation recommends removal of these roots when discovered. This process can be performed separately or included in a Root Enhancement Service as the proper soil excavation technique is done using the supersonic jet of compressed air as described above.

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



Pictures on right: girdling roots exposed through compressed air excavation

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