

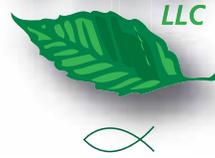
Sherdec Tree Service

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Root Regeneration

Putting Life Back Into
Compacted Soils

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Healthy Soils vs. Compacted Soils

Healthy soils are porous and contain the necessary organic material and life-giving micro-organisms required for plants to survive. Nutrients, water, and oxygen are readily available, allowing plant roots to grow and thrive. Compacted soils literally have the life-giving properties squeezed out of them. They contain low oxygen and water levels and few microorganisms.

Because roots have difficulty growing and surviving in compacted soil they can become stunted or may even die. Soil compaction is very common in urban soils. Moreover, construction activity and other forms of heavy traffic lead to severely compacted conditions that require remedial action for the trees to survive and retain their aesthetic value.

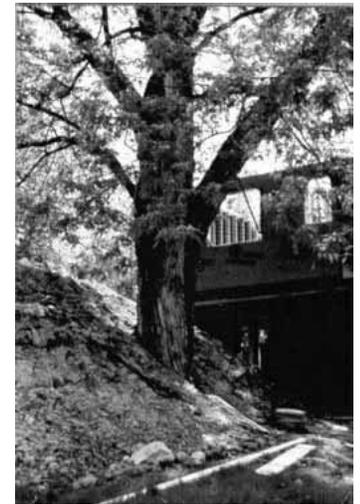
How Does Compaction Affect A Tree?

Trees are energy systems. A healthy tree will generate more energy during the growing season than it will use. Compacting the soil around a tree interrupts the tree's energy generation and storage process. The tree begins to decline, but symptoms often do not show up immediately because some trees have sufficient stored energy to support life for a number of years. It can take five or more years for a healthy tree to show decline symptoms. Once the energy in the tree becomes depleted, nothing can be done to bring the tree back to health.

What Causes Soil Compaction?

Any activity that compresses the soil is unhealthy for plant roots. The most common causes are:

- Construction equipment.
- Parked vehicles or driving under trees.
- Fill-piles or stacked building materials.
- Landscaping.
- Any activity on the soil surface when it is moist or wet.



Preventing tree damage during construction requires careful planning and contractor cooperation in adhering to the plan.

Which Trees are Worth Saving?

Preventing tree damage during construction requires careful planning and contractor cooperation in adhering to the plan. Sherdec Tree Service's Root Regeneration Puts the Life Back into the Soil

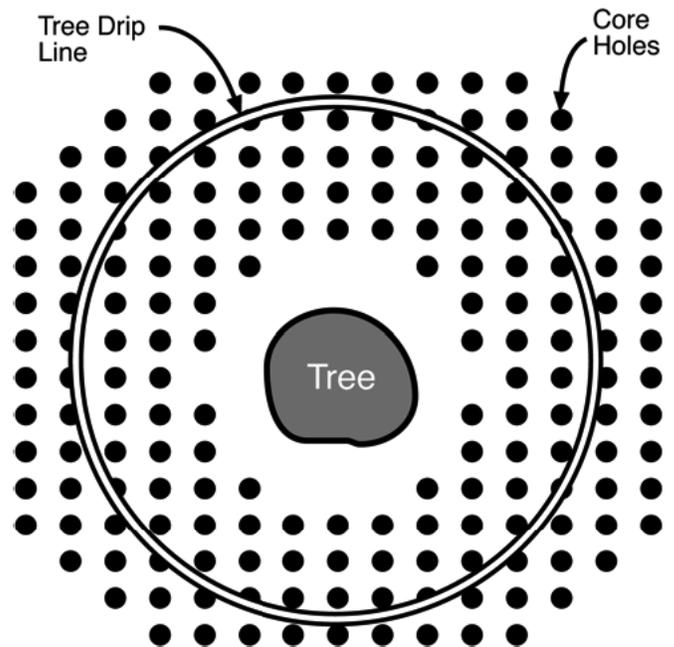
A tree injured by soil compaction requires the creation of pockets in the soil that allow for optimal root growth. It is essential that room be created for new roots to grow, respire, and take up water and nutrients.

Sherdec Tree Service's Root Regeneration Methods Are Based on Science.

First we assess the tree's condition and estimate whether the tree has the capabilities to respond to the Root Regeneration treatment. Next we create room for roots to grow by removing cores of soil that are 4—6 inches in diameter, and through the compacted layer -- usually 8 to 18 inches deep. Holes are spaced 2-1/2 to 3 feet apart in a grid pattern throughout the entire soil improvement area. The holes are then backfilled with a carefully combined mix of materials that will provide ideal growing conditions for roots. Materials include original soil from the site, compost, and a small amount of natural organic, slow-release fertilizer. If necessary, a low nitrogen Rootcare Fertilizer treatment is hydraulically injected under high pressure into the soil after July 1st. The injection includes 10 essential elements necessary for tree metabolism, growth, and energy storage. High pressure application is beneficial because it helps loosen the soil, distributes the elements throughout the root zone, and provides more new spaces for roots to grow.



Root Regeneration in progress.



Root Regeneration Pattern

4" - 6" diameter cores are drawn out of the ground and replaced with a blend of material that will provide optimum growing conditions for root mass generation Root Regeneration in progress.

Sherdec Tree Service's Root Regeneration processes are designed to facilitate a major expansion of the treated tree's root mass, allowing increased carbohydrate (energy) manufacture and storage by the tree.

Sherdec Tree Service's Commitment to Quality

Our processes are thorough and effective, and the best in the business. We promise to use the finest and safest materials, using quality workmanship. The quality of our care will provide your trees with an improved soil environment to help them overcome the negative effects of soil disturbance.