



What to do about Surface Roots in Your Landscape

Tree roots like to live below ground. That is where the moisture and nutrients that sustain tree growth are found. Some species have root systems that are acclimated to wet soils. They are known as “bottomland species,” and their root systems are located closer to the surface of the ground. Also, as the impacts of rain, yard watering and foot traffic erode soil, roots may appear to be “coming right out of the ground.” Roots on the surface of the soil can cause all kinds of problems, but not necessarily for the tree.



Given the chance, trees adapt to their environment over time, and trees can live with a significant portion of their absorbing roots close to the surface. This is particularly true in soils that contain heavy clay or in compacted soils, through which rainfall does not easily percolate. Over time, these roots can adapt, becoming quite large and creating real problems in the landscape, particularly where lawn maintenance or foot traffic occurs. Often times, the tripping hazard and lawnmower damage is enough to make landowners want to take extreme action. Fortunately, with a little patience and time, the extent of the problem can be diminished.

Solutions

Surface tree root removal is not a solution. Understory planting of ground covers or foundation plants is not a solution. Covering the roots with a foot of soil is also not a solution. Real, long term solutions increase the integrity of the tree's root system and the viability of the tree. There are basically three options open to landowners:

- Remove the tree and its root system
- Place four inches of soil over the root system
- Place four inches of mulch over the root system

Removal of the tree may be the solution for some individuals. After the tree is removed the stump can be ground, sawdust and chips hauled away, topsoil brought in, and the area graded and seeded with grass. This is not a cheap fix, but it is doable. Removal of the entire surface root system is another alternative, but may cost as much as removal of the entire tree. Since the root

system is so extensive, its removal will seriously impact a large portion of your yard *and* require major landscaping to get things back to level.

Placement, by hand, of no more than four inches of soil over the roots is another option. Spreading more than four inches of soil will inhibit the amount of oxygen getting to the root system and could cause its health to decline. The following year, another four inches can be added and grass seed may be sewn over the area if there is enough sunlight to support a lawn. Sod is another option after the first year of soil has been brought in, but its establishment over surface roots must be done by hand and can easily restrict water flow to the root system. It is important to resist planting the soil area with shrubs as the excavation of the soil to place the plants will most certainly damage the surface roots.

Mulching the entire surface root area around the tree is the solution most people choose. It is generally cheaper and better for the tree. Again, approximately four inches of composted wood chips works best to help hold in soil moisture and return nutrients to the soil. Pine straw is acceptable to hide the roots, but won't be a long term solution to the problem.

Whichever option you choose, remember that a tree must be healthy from the start. Covering the roots of a structurally unsound tree to hide a problem can come back to haunt you if the tree fails because of your negligence. Should you have concerns about the health of your trees, contact a certified arborist for a full assessment.

