

## News Article

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## What to do With Tree Surface Roots

Tree roots growing at or slightly above the soil surface are called surface roots. Homeowners having trees with these surface roots are frustrated with the additional challenges posed with mowing and the uneven walking surface around trees. A question I often receive is whether anything can be done with surface roots.

Lindsey Purcell, Purdue Extension urban forestry specialist, recently authored an Extension publication on this phenomenon.

“Genetics determine the characteristics of root growth in a tree, but generally speaking, tree roots develop similarly among temperate zone species,” said Purcell. He added that a tree’s lateral roots, those growing horizontally from the upper part of the taproot, are often the most vigorous and form the main framework and support to anchor a tree.

“Examples of trees with shallow root growth include maples, sycamores, willows and some ash species,” he said.

“These shallower roots rise to the upper, nutrient-rich layers at the surface of the soil,” said Purcell.

“Then, as traffic occurs – such as mowers and foot traffic – the soil is eroded away, exposing the roots and creating a maintenance challenge.”

Purcell poses the question that is at the crux of the matter, “How can surface root issues be improved without compromising tree health?”

Many attempts to solve this problem have been attempted by homeowners. Purcell stated that common strategies attempted by homeowners, but *not* recommended, include removing visible surface roots by cutting or grinding, adding a heavy layer of topsoil to cover exposed roots, and planting a raised flower garden or groundcover over surface roots.

“The best solution for bothersome surface roots is simply to mulch,” said Purcell. “Wood mulch is the best way to cover tree roots above the ground.” He suggested 2-3 inches of wood mulch to reduce the need to mow over the roots and increase moisture retention in the root zone. “For best results, create a mulch ring that extends out to the dripline, if possible, or at least to where the surface roots have dissipated enough for healthy turf growth,” he said. The dripline is the invisible vertical line where the tips of lateral branches end.

“When dealing with surface root syndrome, be certain that any mitigation does not compromise tree health and increase the risk for tree failure,” said Purcell. While troublesome, he said that homeowners can make a positive change in the landscape and create an environment where trees and turf can survive harmoniously together.

Find Purcell’s publication FNR-585-W entitled, “Surface Root Syndrome,” at [www.edustore.purdue.edu](http://www.edustore.purdue.edu).