

## **Raised Beds around Trees—A Bad Idea for Landscapes**

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As we plan for our much anticipated outdoor projects this gardening season, let's discuss the tree-killing practice of building raised beds around trees. Don't get me wrong here—I am not talking about planting hosta beneath a tree, I'm talking about building a RAISED bed around a tree. This unfortunate practice leads to many dead trees, often years later when the tree owner no longer connects the tree dying with the creation of the raised bed.

Case in point, a question from a concerned tree owner revealed that a raised bed built around a 37 year old pin oak four years ago couldn't possibly be the reason for the tree failing to leaf out this year, could it? The answer to this, unfortunately, is yes.

Too often, tree owners think they've "gotten away" with implementing an ill-advised tree practice because the tree didn't die right away. The truth is, bad tree practices don't become apparent until 5 or more years down the road. This is often too late for tree owners to rectify the problem because the tree no longer has the resources to recover.

A better understanding of why this kills trees starts with knowing where tree roots are and how they function. Every tree will have a few deep anchoring roots, but the vast majority spread parallel to the soil surface, in the top 18 inches or so of soil. That they occupy this area is no accident—tree roots need oxygen to survive and oxygen is readily available in the top 18 inches of soil. When soil is piled over a root system, it immediately puts the lower roots out of range of their oxygen source. Roots begin to die, starting the tree on a long slow decline and, eventually, death.

Building a raised bed around trees puts them in stress, which depletes their reserves for defensive measures against insect infestations and disease pathogens. So when these problems arise, trees with raised beds around them fare worse than their happily-growing counterparts who can readily marshal their defenses. If a raised bed has already been built, taking away the raised bed and the excess soil are the only real option for saving the tree. Bear in mind a tree in decline may not rally from the removal of a raised bed if the raised bed has been in place for 5 or more years.

For the sheer amount of time it takes to grow a tree, a tree owner who values his/her tree will consult a knowledgeable tree expert before implementing a landscape project that could potentially kill the tree.



A gorgeous raised bed built around this pin oak tree four years ago leads to a leafless canopy in May.



With more than half the canopy of leaves gone, this raised bed has compromised the tree's health.