

Roots and shoots: think like a tree

08 June 2020

Recently I transplanted four river birch and three elderberry shrubs that I tucked into the raised bed of my garden as seedlings years ago.

They are 3 to 10 feet tall now and I did everything wrong in reference to timing. Even though I was careful about digging out the roots, I still had to cut the primary root of each out of the hardware cloth of the bed. I tried to make up for the not-so-perfect conditions with good planting, water and managing the rest of the root ball carefully.



Trees in nature have visible thick roots showing at the base of the trunk. This is called "root flare." The root flare should be showing just above the soil when you plant a tree. Deeper than this and the roots could circle and girdle the trunk, cutting off water and nutrients to the tree.

The next time you're walking in a forest, notice how the roots of trees meet the soil. Then compare that with how the roots of trees look in your yard or in other places where people have deposited them.

Root flare should also be visible and open, protected from the mulch we tend to pile around our trees. There's even a term for it, "volcano mulch," in which the trunk sticks up from the mound of mulch. Often you'll notice trees that stick straight up from the soil as if they'd been jammed down into it. Below the soil there's probably a girdling root.

Here's the thing about root flare: Once you know about it, you won't look at trees the same way again. I'd guess that more than 50 percent of the trees I see planted by people have problems that impact whether the tree will thrive.

Here are some tips on how to plant a tree:

Roots

Whether it's a seedling or a more mature tree, examine the root structure before planting. Remove any burlap or other wrapping. Rinse the soil from the root ball to find the primary root and expose the root structure. Cut away any circling roots.

The hole

After digging seven planting holes in clay soil filled with rocks, I know what I'm about to tell you to do is hard. Excavate an area twice as wide as the roots but only slightly deeper than it needs to sit at the correct height above the soil.

When you hold up the tree, you'll notice that the column directly under the trunk is higher than the space where the roots spread out. This area needs to be supported well. Pile soil underneath it for solid placement.



Filling the hole

Replace the soil around the roots. It isn't necessary to add compost or amendments. In fact, research has shown that successful plantings use only native soil.

Separate any rocks. As they shift in the ground, the tree will move, too. You want a base of soil that it can spread out in.

Pack the soil gently but firmly over and around the roots. You don't want a lot of air pockets that will cause the tree to shift.

After planting

Water the tree in well. In the first season, make sure to water regularly, maybe even daily. The root system won't be developed to get to the water it needs.

Spread wood chip mulch in a 2-foot diameter around the tree up to the trunk but not piled around it to suppress weeds that will compete with it and retain moisture. Weed regularly.

It's not too late

Now that your eyes have been opened to best practices for tree planting, you might find trees that aren't thriving in your landscape. It's possible and even the best thing to dig them up and try to correct the roots if they are small enough to manage.

 $Source: \underline{https://highlandscurrent.org/2020/06/08/roots-and-shoots-think-like-\%E2\%80\%A8a-tree/$