

What is the best method to transplant trees, shrubs & perennials?

(b) Transplanting

A healthy root system is life-supporting:

- absorbs & transports water
- absorbs & transports nutrients & minerals essential to photosynthesis
- stores nutrients & carbohydrates
- anchors the plant to the ground.

FIRST ...WASH the planting material off the roots

(Refer to: What is the best method to transplant trees, shrubs & perennials? (b) Root washing)

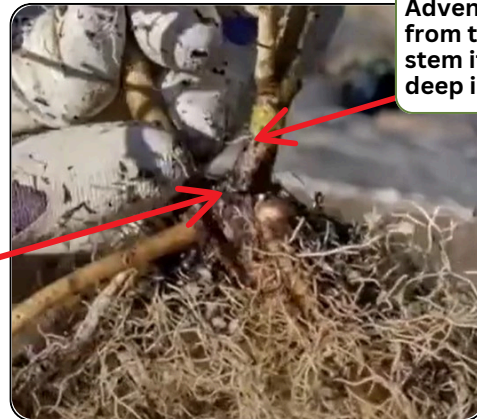
THEN ...CORRECT misaligned roots

- remove circling and J-shaped roots and roots that are too stiff to spread out
- remove adventitious roots growing above the root flare



Prune roots growing in the wrong direction that cannot be spread out straight.

Planting level is at the root flare. (This is a multi-stemmed shrub so new shoots originate at the top of the root ball.)



Adventitious roots grow from the tree trunk or stem if it was planted too deep in the container.

NEXT ...PLANT

1. dig the width of the planting hole to match the spread of the roots when straight
2. set the plant on a mound in the middle of the hole with the root flare slightly above the final soil level to allow for settling
3. spread the roots out like the spokes of a wheel and angle them slightly down
4. cover the roots with the same soil removed from the hole to about 1/3 to 1/2 the hole depth
5. water well (this is called "mudding in" and will wash the soil down and around the bare roots)
6. add another layer of soil and water...continue this sequence until added soil is a bit above the level of the surrounding soil and right at the root flare
7. gently pat down the soil with your hands if needed
8. add a 10 cm layer of mulch around the plant, but 10 cm away from the plant trunk.

Dig a hole with a center mound.



Set the plant on the mound with the root flare slightly above final soil level to allow for settling...then straighten the roots out.



Cover the roots with existing soil to 1/4 to 1/2 the hole depth & water well ("mudding in").



"Mudding in" washes the soil down and around bare roots, eliminating air pockets.

NOTE: Do not prune the above ground stems/foliage for a year, even if some roots have been pruned.

RESOURCES

PHOTO Credits:
Photos from VIRL Gardening Series (resource #2).

1. Curtis, J.. (2023). *Girdling Roots: The Silent Tree Killer*. LEAF: <https://www.yourleaf.org/blog/jon-curtis/oct-04-2023/girdling-roots-silent-tree-killer>
2. Gurrad, D. (2024). *Root Prep for Successful Transplanting*. VIRL/Virtual Gardening Series: <https://my.nicheacademy.com/virl/pathway/30786/course/26567/lesson/191031>
3. NOVI. (2021). *Prevent girdling roots from choking out your trees*. <https://novi.org/News/Prevent-girdling-roots-from-choking-out-your-trees.aspx>
4. Spengle, T. (2021). *What Is Root Washing*. Gardening Know How: <https://www.gardeningknowhow.com/ornamental/trees/tgen/what-is-root-washing.htm>