

# How to Transplant Trees and Shrubs Successfully

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During late February and March, conditions offer good opportunities for moving plants around gardens. One of my neighbors commented, upon watching me engaged with shovel and tarp, "Some people move furniture, but you seem to move plants!" Getting a garden rearranged is satisfying late winter work.

One garden column reader asked about the potential for moving a large willow tree, and about whether it would thrive if moved. Part of the potential success of this effort depends on the definition of 'large.' Nurseries routinely supply deciduous trees 12-15 feet tall with root balls about 3 or 4 feet in diameter. If the tree is substantially larger than that, it may be physically impossible to handle without assistance. Professional nursery specialists use heavy equipment to help with the mechanics of digging and wrapping large trees. The larger the tree, the more complex the transplantation effort.

Anyone planning to move trees or shrubs needs to get this done while the plants are dormant, between now and about mid-March. This is the ideal time to do it. Once any tree begins to leaf, transplanting becomes trickier and the stress to the plant increases. Willows often begin growing in late February or even earlier. They thrive in naturally moist areas and can be planted where soil stays boggy all summer.

Willows are relatively easy to establish. Some gardeners would say they are too easy to grow! The chances of moving a willow successfully are better than with many other types of trees. However, all digging and transplanting processes will remove roots and stress the plant. In effect, you're creating a bare root plant and will lose at least 75-80% of the roots.

If you can plan in advance for a tree move, consider doing "root-pruning." Root pruning means digging around the plant, leaving it in place but cutting through the roots to define a compact, workable root ball for moving. It's best done at least one year before the move. Using a sharp shovel, drive it through the root mass, cutting off roots and leaving a circle three or four feet in diameter. Don't dig the tree up. Just define the shape of the root ball you will remove next year. During the ensuing year, the cut roots will form denser root hairs and the tree will be easier to move, with less stress. Keep the plant well watered in the summer to assist its survival and the process of developing new root hairs during the year before the actual transplanting.

It's best to have the area prepared for installation before digging up the tree you want to transplant. Do not add any amendments to the soil, but dig a hole as deep as the root ball and two to three times wider. Digging and loosening the ground is vital for the health of the tree to be planted.

When digging the plant itself, use a sharp spade to cut cleanly through roots. (If the tree or shrub hasn't been previously root-pruned.) If the plant suffers a lot of root breakage, trim off broken roots and make clean cuts with clippers before planting. Slide the tree out of the hole onto a tarp to make it easier to handle and move. Obviously, the more roots that can be saved, the stronger the plant will be.

Never let the roots dry out or freeze. Cover the roots when moving. Settle the tree in the new location, being sure that the trunk and roots are at the same level as they were in the original place. Planting too deep is a common mistake, and it contributes to tree decline. Some growers even recommend settling the plant slightly higher (an inch or so). Water it in well, being sure to pack soil against all the roots to prevent air pockets.

Don't put fertilizer in the hole. Wait until the next growing season to fertilize, because the roots must re-establish in order to take in the fertilizer. Do mulch over the roots, placing about 2-3 inches of any organic mulch.

During the next two summers, at least, the tree will require deep watering at least every two weeks. The main key to its survival, once the transplantation has occurred, is not letting the plant dry out after its root system has been stressed. This is true of any transplanted or newly installed landscape.

Be sure that you've allowed enough space and an appropriate place for the eventual growth of the tree. Know the growth habit of the plant. For instance, willows have penetrating, vigorous, and potentially invasive roots, and must be planted where they can't invade water systems or house foundations. Like many fast-growing trees, willows are relatively short-lived in landscapes, a few decades rather than hundreds of years.

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Source: WSU Extension. <http://gardening.wsu.edu/column/02-14-99.htm>