

POST-PLANTING CARE OF WOODY PLANTS

SYMPTOMS: Transplanted trees and shrubs frequently undergo a prolonged period (2 to 5 years) of slow growth and reduced vigor due to transplant shock.

CAUSE: Problems with transplant shock following successful tree or shrub planting are usually due to improper post-planting care.

SOLUTIONS: Proper site selection and good planting techniques help induce root growth into surrounding soil so that the original balance between roots and above-ground shoots is restored as quickly as possible, minimizing the severity and duration of transplant shock.

If the plant has been suitably matched to the environment in which it is placed and has been correctly planted, post-planting care to minimize transplant shock should include proper watering, mulching, staking, pruning and fertilizing.

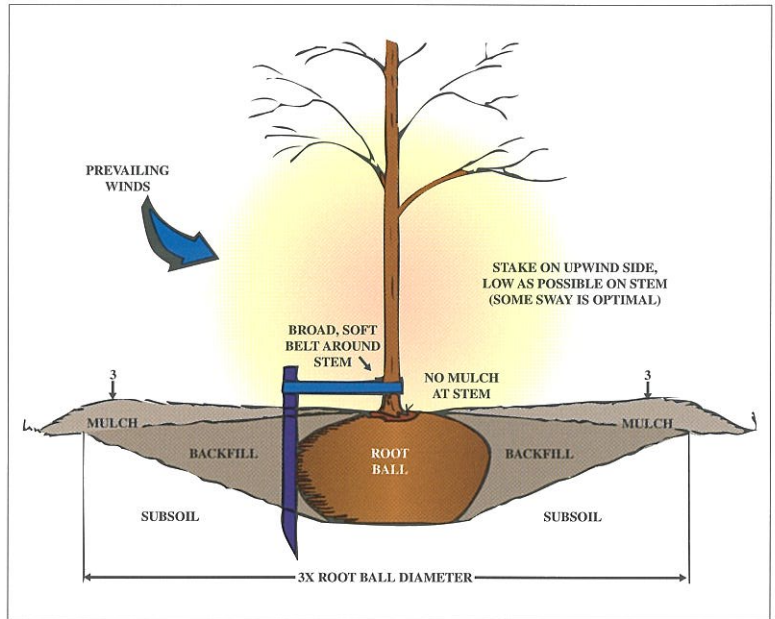


Figure 1. Some elements of good planting and post-planting care are illustrated.

Proper irrigation (**watering**) is crucial to balance water and oxygen supply to new roots. The most common problem with young trees and shrubs is either too little or too much water in the soil. Most woody plants do best with deep, but infrequent, watering. Soils should ideally contain 25% water and 25% air space.

Newly transplanted trees should be **mulched**. Good mulch beds replicate organic forest-litter "sponges" that buffer water, air and temperature extremes in nature. The ideal mulch pattern tapers from a two- to four-inch depth of well-composted organic matter at the dripline of trees and shrubs to bare soil at the trunk. Sandy soils need deeper mulch layers over the new root zone than clay soils.

Trees that are **staked** when installed in spring for protection from prevailing winds generally can have staking and banding material removed in fall; fall-planted trees can be freed late the following spring. Tree wrap should generally be removed at planting time; however, some fall-planted trees with thin, smooth bark may overwinter with wrap, as long as it is removed before leaf growth in the spring.

All injured, malformed, crossing and poorly attached branches should be **pruned** at the time of planting. Pruning to branch growth can be initiated after one full growing season has passed, but winter-killed and dead wood should be removed promptly. Avoid the practice of "balancing" above-ground shoot growth with the root system upon installation. Root systems require as many branch tips left intact to trigger other growth.

If the transplant was not fertilized at planting time, **fertilize** with a low-burn/low-salt-index material that will provide slow-release nitrogen. The nitrogen benefits shoot and root growth within the first growing season following application. Davey's Arbor Green® fertilizer is a superior source of controlled-release nutrients.