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The Myth of Arbor Day/Earth Day Planting in the West: "Arbor Day/Earth Day is an ideal time to install trees"

The Myth

Arbor Day, and our more recently established Earth Day, are regarded as ideal times for community volunteers to work together in replanting landscapes. Arbor Day originated in Nebraska in 1872 as a way to encourage tree planting in a region largely composed of grasslands. This initial planting of one million trees was so successful that other communities in the United States and around the world adopted the practice of community tree planting during the spring. While Arbor Day is officially celebrated on the last Friday in April, actual planting dates are determined separately. Some southern states plant as early as January or February, while more northern locations may plant as late as May. (For Washington state, Arbor Day is set as the second Wednesday in April.) These planting dates are partially determined based on the average date of the last hard freeze for each region.

Earth Day, celebrated on April 22, has also been adopted as a time to revegetate human-altered landscapes. Reminiscent of the original Arbor Day, this year's Earth Day included a "million tree" planting event: "Be part of the millennium's first big tree planting campaign." As spring events, both Arbor Day and Earth Day help satisfy our urge to get outdoors and garden, clean up, or otherwise improve our environment. Planting mania is reinforced by the abundance of flowering trees and shrubs available at nurseries during the spring and summer months. One tree advocacy group's recent publication asserts that "now [summer] is the *coolest* time to plant a tree!" Even though the authors later state that "trees need water", this is overridden by the directive to "choose a tree that is drought tolerant or uses a low amount of water." (This also reinforces the myth that drought tolerant plants can be installed and ignored because they don't need water.)

The Reality

The climate in the western half of the country differs dramatically from that in the east in that summer rainfall is minimal. In the western part of the country, different regions may experience 2, 6, or even 10 months of low rainfall. Much of the country east of the Rockies does not experience summer aridity. For example, let's compare the difference in rainfall during the months of June through August. In Omaha (where Arbor Day originated), the average total precipitation during the three summer months is 10.62 inches. In Seattle, the average total is a mere 2.03 inches. This is insufficient rainfall for anything but *established*, native or Mediterranean-climate plants growing under near-optimal conditions: most if not all urban landscapes do not fall into this category.

Since we do experience droughts nearly every summer, it is crucial to provide supplemental irrigation to newly installed (spring) landscapes. Generally this means a couple of hours of watering once or twice a week. Keep in mind that trees and shrubs planted in the spring and summer use a significant amount of their resources for above-ground growth. Since root growth is favored during the dormant season, it's best to install landscape plants in the fall. It has been demonstrated that shrubs and trees planted during the fall suffer less environmental stress than those planted in the spring or summer.

The Bottom Line

Spring-planted trees and shrubs in the western U.S. will require substantial irrigation.

- Newly installed plants, even those that are drought tolerant at maturity, require substantial irrigation throughout their first season.
- Be sure to clear existing vegetation, especially turf, from the planting area. Mulch well after installing plants.
- Use Arbor Day and Earth Day as opportunities for maintaining existing landscapes. Pruning, weeding, mulching, etc. are all beneficial activities that volunteers can learn to do and that have big visual impacts.
- In moderate western climates, choose an autumn date for community planting efforts. Irrigation is less of an issue as temperatures drop and root systems can begin to establish during the winter months.

For more information, please visit Dr. Chalker-Scott's web page at http://www.theinformedgardener.com.