

TREE WATERING – frequently asked questions

What time of day is best to water trees?

Before sunrise or after sunset is suggested.

Why does time of day matter?

Tree health can be fostered by timing of applications. In the absence of available soil moisture, leaf stomata may close to conserve water. Frequency and duration of such episodes restrict the tree's capacity to take-in carbon dioxide, generate food, and protect itself from heat damage.

Where should water be applied for an established tree?

The root zone of established trees can extend to and beyond the lateral most extension of branches. Water the root zone but avoid applying water to the root crown next to the trunk, impervious surfaces, or near home foundations.

Where should water be applied for a newly planted tree?

Roots of newly planted trees are initially limited to the size of the root ball. To promote successful transplanting and root growth ensure the root ball and surrounding backfill is moist. Water applied inside the margins of a small berm of soil formed during planting that surrounds the root ball can help direct moisture to roots during the first growing season.

How should water be applied?

Slow. A few examples of water-wise application devices include; automated drip-system, soaker hose, root fork/needle, soft spray wand, and perforated sub-soil applicator.

What influences frequency and volume of irrigation?

Season; soil characteristics; site features; exposure; slope; ground-cover; mulch layer; owner expectations; and tree species, size, condition, and location. Trees in groups usually require less supplementation than stand-alone specimens.

How much and how often should water be applied?

5 to 10 gallons per inch of trunk diameter measured at 4.5-feet above the ground is recommended. Frequency varies but generally, April through September, water newly planted trees 2 to 3 times per week; water established small to medium size trees once per week; large trees should be watered 2 to 3 times per month.

Periodically check soil moisture 12 to 24-inches below the surface with a small diameter soil probe, auger, or improvised 'dip-stick'. If the soil is dry consider shorter intervals between applications. If it's moist extend intervals. Soil drainage and water holding capacity, radiant heat, wind, relative humidity, and Evapotranspiration influence moisture content.

Can too much water be provided?

Yes. Water applied too often or in excessive amounts is wasteful and can create anaerobic soil conditions. One way to avoid over-watering is to alternate water zones within the root zone. For example, if there are six emitters in the root zone forming a circle around the tree run every other emitter during one application and the others the next application.

Do water requirements change with tree age and condition?

Yes. As trees grow their water requirements increase. As their condition declines their usage declines.

Why is water so vital to trees?

Life-sustaining processes of trees occur in water. Without water these processes are impaired or cease to function.