

*Drought stressed tree*

Watering Drought Stressed Trees

All trees, even mature ones need water. Significant changes in climate patterns are impacting entire ecosystems. Our urban landscapes are not immune to these changes. In fact, trees in urban areas are more prone to drought damage and death than natural stands of trees. The best solution to help trees through a drought period is to **water your trees!**

Trees that do not receive enough water are unable to create new growth. When this happens, root development is reduced and wound formation restricted. As trees reach this stage, they start to shut down and become targets for diseases and insects that can kill them.

Recommended Watering Techniques

1). Soaker Hose

Wrap the hose around the base of the tree at least 1-2 feet from the trunk. Turn the water on in the morning when you leave for work and turn it off when you get home. Do this once a week during summer drought periods.

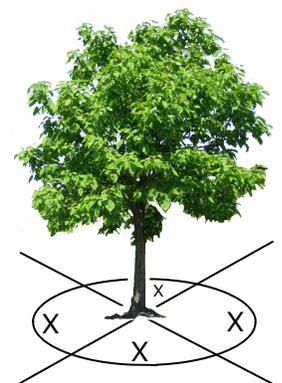
*Soaker hose*

2) Hose Set To A Trickle

A trickle is more than a drip and less than a gurgle. Visually divide the area around your tree into 4 sections. Place the hose about 2-3 feet from the trunk in section one and let the water soak into the ground for about two hours, move the hose to another section until you have fully watered all four quadrants over the period of a day. Water once a week during summer droughts.



With hose set to a slow trickle, water all four areas around the tree marked with an x.



Watering Trees Impacted by Drought Conditions

3) In-Ground Irrigation

Set your system to run an extra hour in the zones where you have trees and shrubs. This will allow the water to penetrate through the turf roots and thatch and allow more water to soak down to the roots of the trees.

All methods should be done once a week, while your tree is experiencing drought conditions.

Sprinklers are not recommended! Sprinklers work best for watering grass, not trees. By using the recommended soaking techniques, you saturate the grass in the spot where the hose is, enabling water to move beneath the root zone of the grass and get to the tree roots where it is needed. Trees can die even when the grass is green, because grass is the better competitor for water.

Fertilizing with high nitrogen fertilizers is also not recommended. Fertilization can worsen drought conditions by forcing plants, especially trees, to grow despite not having enough water to support that growth. During a drought we want to encourage trees to conserve energy rather than expend it.

The reality is if you don't water your trees during drought, you risk losing your tree. There are products to help maintain your trees' health, but most important is the care provided by proper watering.

If you have any questions about watering trees or any other preventive tree care practices, please your St. Paul City Forester or a Consulting Arborist at the Urban Forestry Institute.



A well hydrated tree

An integrated approach

When caring for urban trees it is important to make a complete evaluation of all environmental conditions to accurately diagnose all stress factors and prescribe care based on specific circumstances. This prescriptive care will help your tree meet its full potential.



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