

Tree Watering Tips¹

Caring for Trees during Extreme Drought

Texas is in the midst of one of the worst droughts in recorded state history, and it's creating disastrous results for trees across the state. Some trees are dropping their leaves and branches, while others have leaves that are wilting and turning yellow or brown. Some have even died. It's hard to say for sure just how many trees we might lose before the drought breaks. It may be Spring 2012 before we know whether some of our dormant trees will make a comeback.

Until then, the most important thing you can do is ...**water, water, water!**

Why should I water my tree?

The time has passed for early warning signs. If you have a tree in your yard, it's likely stressed from the drought and needs water. It's a small price to pay — literally just pennies per gallon — for all the benefits trees provide.

When should I water?

Check with your city or local water company for possible restrictions on watering methods and frequency. If you can, avoid watering during the hottest part of the day — 10 a.m. to 6 p.m.

How often should I water?

During this extreme drought, mature trees need to be watered about once a week, while younger, newly-planted trees need to be watered about three times a week. You can use a screwdriver to determine if it's time to water; simply try to push it into the ground. If the ground is dry, you won't be able to. If the ground is wet, you will. If you can't get your screwdriver to easily go at least 6 to 8 inches into the ground, it's time to water.

What is the best way to water my tree?

For large, valuable yard trees, you can water with a garden hose or soaker hose — both preferred methods, especially under water usage restrictions — or a sprinkler, which is the fastest way to water large areas. A 5-gallon bucket with holes drilled into the bottom can be used to water smaller trees. See *accompanying pictures and instructions for more information*.

What if I have in-ground, pop-up, automatic sprinklers?

Take a screwdriver and poke it into the soil under the tree. If it doesn't go 6 to 8 inches deep in the soil, give your tree more water with the outlined methods.

What should I not do in a drought?

Don't apply high-salt, quick-release fertilizers or dig under the canopy of a tree during a severe drought. It's also not a good idea to prune live branches off young trees. They may need these branches once the rains return.

Where can I get more information about tree care?

Contact a local, certified arborist through the International Society of Arboriculture or Texas Forest Service. See "Additional Information" at the end of this document.

¹ This document is a reformatted version of an information bulletin published by the Texas Forest Service of Texas A&M University. The document has been made smaller, and text has been added about an online video of this information and a call-in hotline service provided by the Montgomery County Master Gardener Association.





Watering with a Garden Hose

1. Before you water, test your soil with a screwdriver. If the screwdriver doesn't go 6 to 8 inches into the soil, it's time to water deeply.
2. Turn the faucet on high and let the water flow until it begins to run off, a good indicator that the ground is no longer absorbing it. Then lower the flow.
3. Start close to the trunk and work your way out until you've covered the entire area under the canopy.
4. Conduct the screwdriver test every 30 minutes until you can get it at least 6 to 8 inches into the ground. You want the water to soak about that far into the soil.
5. Once you can get the screwdriver to slide easily into the ground, it's time to move the hose and repeat these steps in a different spot.
6. Repeat this process every week during a severe drought. Don't forget to use your screwdriver to see if you need to re-water.





Watering with a Soaker Hose

Slow watering that works best for small to medium trees.

1. Before you water, test your soil with a screwdriver. If the screwdriver doesn't go 6 to 8 inches into the soil, it's time to water deeply.
2. Encircle your tree with a soaker hose. If you hook several soaker hoses together, use just one flow restrictor next to the garden hose connection. *Make sure you follow the directions that came with your soaker hose.*
3. Generally, soaker hoses take about four hours to put out an inch of water, which is about how much a mature tree needs every week during a drought.
4. Start near the trunk and work your way out, making sure all ground under the canopy has at least an inch of water.
5. Repeat this process every week during a severe drought. Don't forget to use your screwdriver to see if you need to re-water.



Dry soil before watering



Wet soil after watering



Watering with a hose sprinkler

The fastest way to water your trees.

1. Before you water, test your soil with a screwdriver. If the screwdriver doesn't go 6 to 8 inches into the soil, it's time to water deeply.
2. Run the sprinkler until you have put out about an inch of water under the tree. This should take about 30 minutes depending on your sprinkler.
3. For a more specific reading, set a tuna or cat food can next to the sprinkler. Check the can every 15 minutes or so until you know how long it takes to put out an inch of water.
4. Once you know how long it takes, just set the timer and move your sprinkler every time it goes off.
5. Remember to start near the trunk and work your way out, making sure all ground under the canopy has at least an inch of water.
6. Repeat this process every week during a severe drought. Don't forget to use your screwdriver to see if you need to re-water.



Dry soil before watering



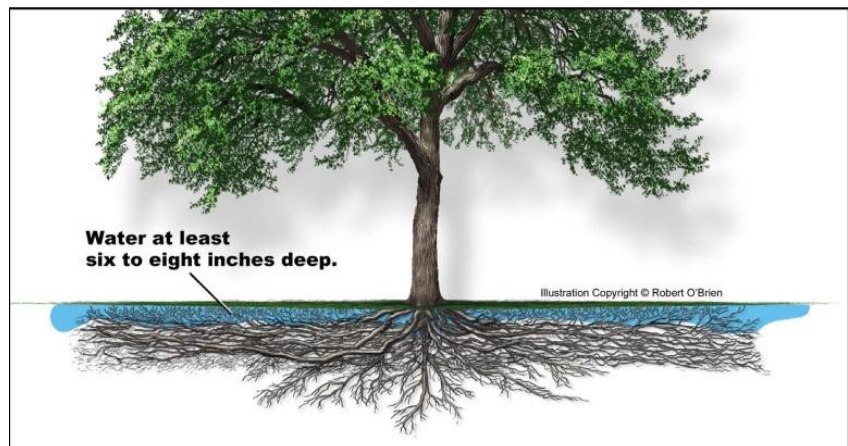
Wet soil after watering



Watering with a 5-gallon bucket

Slow watering best for small or newly-planted trees.

1. Before you water, test your soil with a screwdriver. If the screwdriver doesn't go 6 to 8 inches into the soil, it's time to water deeply.
2. Take a five-gallon bucket and drill several small holes in the bottom.
3. Set it near your small or newly-planted tree, fill it up with water and then let it slowly flow out.
4. Remember to start near the trunk and work your way out, moving the bucket around to ensure you've watered the entire area underneath the tree canopy. The photo on the bottom right delineates in blue the areas where you should water.
5. Repeat this process every week during a severe drought. Don't forget to use your screwdriver to see if you need to re-water.



Additional Resources

- Water your Trees! — A 4-minute instructional video detailing the four watering methods outlined in this document — can be viewed on the Texas Forest Service YouTube page:
<http://www.youtube.com/watch?v=ciEjYvwwQZs>
- Visit <http://texasforestservicetamu.edu> for more information about trees and drought.
- The Montgomery County Agrilife Extension Service of Texas A&M University, located in Conroe, has a free call-in hotline service staffed by Montgomery County Master Gardener Association (MCMGA) personnel to answer your gardening, lawn and tree questions. You can reach the hotline by calling 936-539-7824 from 8:00am to Noon and 1:00pm to 5:00pm weekdays.