



Watering Tips for the Home Gardener

When drought conditions prevail, gardeners have to start making choices about what to water and when. It's not often an easy choice.

Trees and shrubs should top the list. They are a more long-term investment than annual flowers and vegetables. Mature trees and shrubs cannot be easily replaced like a tomato or petunia.

Perennial flowers are next in line due to their longevity.

Cool-season lawns of Kentucky bluegrass, fescue or ryegrass generally go dormant when conditions are hot and dry. Their need for water greatly diminishes once they are dormant.

As a rule of thumb, most plants need 1 inch of water per week during the active growing season. But when temperatures climb past 90 degrees, plants may need at least 2 inches of water per week.

An inch of water should penetrate the ground at least 6 to 15 inches, depending on the soil type. Clay soils are denser, and water doesn't penetrate as deeply as in sandy soils. An ideal garden soil will be moist 12 inches after an inch of rain.

Water early in the morning to decrease the chance of diseases and to lessen evaporation. Watering during the middle of the afternoon can result in more than half of the water evaporating before it enters the soil.

Irrigate slowly so the water has a chance to percolate into the soil instead of running off. Slow irrigation is especially important when watering slopes.

Water where the roots are. The entire flower or vegetable garden may not need to be watered if the roots haven't spread all over the garden. It's more practical to water down the row, or around each plant, instead of having a sprinkler water the entire garden area.

You can bury a coffee can with small holes poked in the bottom to water larger vegetable plants such as tomatoes and vine crops like pumpkins. Place the cans close to the stems and fill the cans daily.

A tree's water-absorbing roots are at the drip-line of the plant—not congregated around the trunk. Water at the tree's drip-line; and for mature trees, water 3 feet beyond that line.

Avoid overwatering trees and shrubs. Water thoroughly once every two weeks for established plants, allowing water to penetrate slowly. Remember

that grass and other plants under trees can grab the water before it gets down to the deeper tree roots.

If you use a sprinkler, choose a pattern that waters where the water is most needed. Most sprinklers need to remain on for at least 90 to 120 minutes to supply the inch of water needed. Make sure hose connections are tight to prevent drips and leaks. Repair hoses if needed. Remember, more water is emitted close to the sprinkler head. Position the sprinkler to provide the water-loving plants the most water.

Drip-irrigation and soaker hoses are often better options than a sprinkler because they can supply the water directly to the soil around desired plants at a slow rate, and without wetting the foliage. Check the soil around the plants every hour to gauge water penetration.

Container-grown plants and hanging baskets may need daily watering. Many container soils have poor water-holding capacities. Additionally, containers are exposed to the sun's heat, warming the soil and potentially "cooking" the roots.

Avoid fertilizing plants during times of drought. Fertilizer tends to promote growth which puts more stress on the plants.

Many plants have mechanisms to reduce water loss. Tomatoes and corn may curl their leaves. Oak and beech trees produce a waxy coating on leaves. Some trees including birches and tuliptrees (*Liriodendron*) will drop some leaves in order to save others.

Mulch to limit water loss from the soil. Apply 4 inches of wood chips, straw or other mulching material. Make sure the soil is moist before applying the mulch.

To reduce water costs, you can use old-fashioned rain barrels to capture water from downspouts. Newer barrels are sealed to prevent mosquitoes from developing. If old containers are used, you'll need to regularly check for mosquito larva. Mosquito larva can be controlled by using mosquito dunks or



doughnuts, which contain a bacterial toxin (*Bacillus thuringiensis israelensis*) that specifically kills the young mosquitoes.

Group plants with similar watering needs together. This practice may be too late for this year, but consider moving plants at the appropriate time to match similar growing conditions. For example, sedums need less water than hydrangeas, so they should be in different areas of the garden.



College of Agricultural, Consumer and Environmental Sciences

University of Illinois~U.S. Department of Agriculture~Local Extension Councils Cooperating
University of Illinois Extension provides equal opportunities in programs and employment.

Author
David Robson
Horticulture Educator
University of Illinois Extension

Design/Editing
Annette Campbell
Communications and Marketing