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Watering Theory

Correct watering is essential for the successful adaptation of plants to the landscape. Instead of merely surviving, your plants will be thriving.

Why Watering is So Critical

A recently planted or transplanted plant does not have a root system that is capable of supporting the rest of the plant. Providing thorough watering during root formation will ensure that a deep root system develops. If frequent light watering is done the plant will develop a vulnerable root system close to the soil surface.

Water serves multiple purposes in plants. It helps the plant transport food and minerals throughout its system. It also maintains pressure in the plant's cells (called turgor pressure, or turgidity), a lack of cell pressure is displayed by the gardeners' worst nightmare—wilting. Just a few hours of wilting can destroy foliage, flowers, or even the plant itself. Water also regulates the plant's temperature. Plants release water vapor during times of intense heat—which is their equivalent of perspiration. If a plant lacks sufficient water it will rob the needed moisture from its own cells, which causes yet more wilting.

Effective Methods of Watering

The goal is to release water slowly enough that it can soak into the soil.

Effective Methods

- A bucket with a small hole in the bottom
- A hose on at a slight trickle
- An irrigation system

Methods to Avoid

- Rotating sprinklers
- A hand-held hose (unless you release the water very slowly)

Thorough Watering

While thorough watering sounds labor intensive, it does not mean that you need to be out watering every day. Here are our recommendations:

Perennials - Container #1 and #3 perennials should be watered approximately every five to seven days. Each plant should receive two to five gallons of water, released slowly so it can soak down through the roots of the plant.

Shrubs - Most shrubs should be watered approximately every five to seven days. Five to seven gallons of water will be sufficient for most plants. It is important to release the water slowly enough to allow it to soak down through the roots.

Trees - Trees should be watered approximately every seven to ten days. Fifteen to twenty gallons of water should be released slowly enough to soak down through the roots.

Watering Notes

- The water requirements of a plant will vary depending on environmental conditions, the plant itself, and the location it is planted in.
- Some plants will show signs of water stress by noticeably wilting. Other plants, especially evergreens, will show no signs until damage has been done. Ask us which plants are good indicators of water stress.
- The morning is the best time to water.

Sources

This sheet has been compiled from experience and information from the Pennsylvania Certified Horticulturist Reference Guide