

Watering Guidelines

Ideally water plants early in the morning, to avoid evaporation loss during the day. On warm summer days, evening watering is also likely to be effective, the dry soil soaking it in readily and low humidity at night reducing risk of disease.

To determine the need for watering, inspect the soil at a spade's depth. If the soil feels damp, there is unlikely to be any need to water, but if it is dry, then watering is probably required for some plants.

Be aware that clay soils can feel damp even when all available water has been used and that sand soils can feel dry even if some water is available. The only way around this is to develop experience in matching the observed state of an individual garden's soil to the growth rate of the plants. Wilting is usually preceded by changes in leaf position and darkening of leaf colour.

How to water

It is better to water the garden before drought really sets in, to keep the soil moisture levels even and avoid soil moisture deficits building up.

Once drought has set in, it is futile to try and remedy this by light watering over a wide area. Light watering may encourage surface rather than deep roots, leaving plants more susceptible to drought. Instead, make a single thorough watering of the plants that are suffering. Try to water in the cool of the evening or the very early morning, so that less water is lost immediately to evaporation.

Watering should never be carried out where drainage is poor as water will do more harm than good. Roots are very susceptible to airless conditions, particularly when the soil is warm in summer.

How much Water

A clay soil (such as the Shepherd's Hill Allotment soil) in which plants are wilting might need 81 litres per sq metre (17.5 gallons per 10 sq ft).

In practice, gardeners are unlikely to regularly let the soil get so dry that plants are wilting, so less water is required. Water can also be saved by applying it to the base of the plant rather than over a wide area.

As a general guide, up to 24 litres per sq metre (5.2 gallons per 10 sq ft) every seven to 10 days will be sufficient to maintain plant growth. It is much easier to calculate how much water you are applying if you use a watering can.

Most watering should be aimed specifically at the **stem bases beneath the foliage canopy**, leaving the surrounding soil dry. This helps to limit weed problems and ensures all the water goes where it is needed.

Tips for economical watering

- **Edible products;** yields and quality are greatly improved by watering at times when drought stress would affect the part of the plant that is gathered. Leafy crops such as lettuce and spinach should never be short of water. Onions require little or no watering. Most other crops need watering at sowing and transplanting time, and then again as the fruits, roots or tubers are developing. It is also a good idea to give a single, thorough watering about two weeks before harvesting
- **Mulching** with a layer of organic matter or gravel at least 5cm (2in) thick, or using opaque mulching sheets, reduces moisture loss from the upper layers of the soil. This may amount to as much as the equivalent of 2cm (0.75in) of rain
- **Removing weeds** is vital, as weeds use up valuable soil moisture reserves

The un-abridged RHS watering advice can be found at;
<https://www.rhs.org.uk/advice/profile?PID=312>