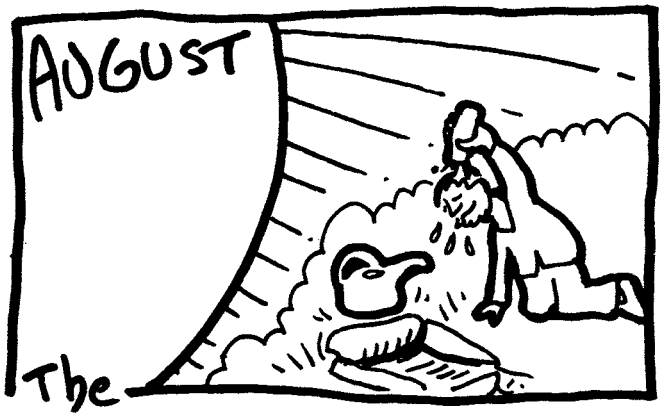

The Subsistence Gardener

Watering

The subject of watering highlights many of the issues facing anyone who wants to grow their own food in today's world.

Where to Get Gardening Advice

The first point is that the degree that you really need to water your garden will be highly specific to your particular location. Some soils dry out a lot faster than others during periods of low rainfall; this can vary even between adjacent plots of land, and can at least partially depend upon how the land has been managed in the past. In some places the water table is far below the surface, and gardeners are highly dependent on rainfall; in other places ground water is much more accessible. In some hot places hardly anything will grow unless it is watered, whilst in more temperate regions watering may not be necessary at all. This means that it is not possible to give universally-applicable advice about how much water each particular crop needs. The best advice comes from neighbours and people who have been gardening in the area for a long time.

Selecting a Site for Your Vegetable Garden

The vegetable garden will probably be the part of your garden that needs the most water. Ideally, if you have a property in the countryside it will come with a plot of land that has always been used as a vegetable garden, which can be expected to have good water-retaining properties, and may have a water-source close by. Failing this, you have to make your own choice; if the garden is small, the decision will probably be automatic, if the garden is larger, it may take a few years of trial and error before you settle on the best spot. It is a good idea to trial an area by growing potatoes on it, as this will give an indication of how much water is available to the plants in the early summer months.

Water Management

For most people, the basic principle is to water as little as possible. This is especially the case if you are having to pay for the water, but it also applies if you have to carry it any distance. Even if you are pumping the water from a well or spring on your own land, it makes sense to economise. In most areas with cultivatable land, water resources are under stress. Felling of trees, removing banks, making fields bigger, ploughing, and fertiliser use have all contributed to water running off the land faster, and, as a result, the water table is generally lower than it used to be, and springs and wells have a tendency to dry up. The problem is exacerbated in areas where farmers draw water from bore holes to irrigate their crops; and, nowadays, it is not unusual for there to be hosepipe bans and water rationing just at the time when your plants need water the most.

Good Practice

There is a lot that can be done to minimise the amount of watering that you need to do:

Crop selection: Some crops do not need to be watered at all. For instance, winter cereals germinate in late autumn, when there is little competition for water, then put down deep roots over the winter, and put on most of their growth in the spring. Hot dry weather in the summer simply helps the grain to ripen. Similarly, in the vegetable garden you can favour hardy crops that can be sown earlier in the year (such as broad beans, peas, onions, etc.) and crops that form deep roots (like parsnips, leaf beet carrots or chicory) and give less space to thirsty summer vegetables such as lettuces, cucumbers, courgettes and tomatoes.

Direct sowing: One of the big advantages of direct sowing is that, when it works, the seedlings start putting deep roots down into the soil, right from the beginning. As the season progresses, these roots follow the water as it retreats from the surface, meaning that it is rarely necessary to water direct-sown plants.

Timing: Even in dry years, there are usually periods of rain. If you can time transplanting your cabbages or your leeks, for example, to coincide with one of these wet spells, they will do much better than if they are transplanted on a hot, sunny day, even if they are watered profusely. The same applies when sowing seeds: in the spring and early summer, seeds will germinate quicker, and the seedlings will grow faster, if the seeds can be sown in warm soil after a reasonable amount of rain.

Weeding: Time spent weeding is sometimes more productive than time spent watering. Weeds are generally tougher than the crop plants, and will win in the competition for water. If you water a weedy patch, you are essentially watering the weeds, and may not help the crop plants at all.

Mulch: Mulch reduces evaporation from the soil surface. Organic mulches have the disadvantage that they can harbour slugs, but a similar evaporation reduction can be achieved by shallow hoeing between the plants to create a 'dust mulch'.

Soil Care: Soil rich in organic content retains water better, and the richer the soil is in insects, worms, and microorganisms, the less compacted it will be, and the easier it is for plant roots to penetrate deeper in their search for water. So the more compost that you can make, and work into your soil, the better.

Gareth Lewis

Water can be poured into the furrow before seeds are sown if the weather is dry