



Watering

Good watering technique is not as simple as it first appears. Watering greatly affects the amount of harvest, pest pressure, and effective germination. Watering too much can be expensive to your water bill and time, but not watering enough can result in lower yields and lost crops and can *also* be expensive as you lose your seeds, plants and time.

SOIL - Start with building good soil. Soil that does not have much organic matter will not absorb and retain water. Avoid bare ground and plant thickly. Do it so that the chosen plants at $\frac{3}{4}$ their size will start touching each other. This spacing is often denser than it recommends on the seed packet, but this way your soil will hold on to more water and there will also be less room for weeds to grow. Good soil and the plants in it act like a sponge. They will grab more water and release it as it is needed. Poor soil with low organic matter cannot absorb much water. The water will run off, drain out, or evaporate more quickly in poor soil.

TIMING - Water in the early morning. Watering in the evening invites plant eating insects and mildews to your plants. Watering in the midday heat of a sunny day stresses the plants and much of the water can be lost to evaporation. Early morning, when your shadow is shorter than you are, is the best time to water. If you are

growing in the colder months, never water plants when there is frost, when temperatures are at freezing or soon will be. Choose warmer days and water as soon as the temperature rises to 36°F.

WHAT TO WATER – The general rule is that vegetable crops need at least an inch of water per week. If your soil is poor, or there is a heat wave, you may need more water. We have placed a rain gauge in the center of the garden that gets emptied on Mondays. When we have an inch or more for the week, we can usually skip watering mature plants.

Germinating seeds, recently transplanted and baby plants must be watered every day until they are established and happy little plants. This usually takes about a week or until they start getting the first true leaves. Then you can start watering them less frequently. Never skip watering a dry bed that has been seeded but hasn't sprouted yet. They may be germinating under the soil and at their most vulnerable stage. If you don't water it, many seeds may never sprout. Flats also should be watered daily (both inside the building and outside the building), as they dry out quickly, and while you are at it, water any potted plants that look like they need it.

WHERE TO WATER – Water the plants and not the weeds or pathways. With larger plants like tomatoes, Brussel sprouts, and pepper plants you can reduce the number of pests and problems by watering at the root level and not spraying the leaves. Trees have a drip zone. If you make a circle at the edge of the leaf canopy, this is where the roots are most active under the soil. While watering raised beds, pay special attention to the corners of the bed. Corners normally get watered less and dry out more quickly.

HOW MUCH WATER – Watering until everything looks wet is only surface watering, and on a hot day, that water will evaporate before the plants can take it up. When you water, take your time. Water until you have small puddles on top. This is the sign there is water under the surface of the soil. This is what we want. When watering trays, make sure you tip the tray to get the water to all corners, and then return the tray to *level*.