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The great watering worry

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HOW much water does the garden need when summer temperatures begin to soar?

What about lawns and garden beds watered automatically on a regular basis, regardless of the changing weather?

When temperatures climb high into the 30s over an extended period, it invariably results in heartache for home gardeners with the leaves on plants become scorched and turn brown or dropping prematurely.

Yet most garden plants have an incredible ability to keep themselves cool. Basically, moisture from the soil is taken in through the plant's roots and pushed out through its leaves, creating an ongoing cooling effect (transpiration). So long as there is adequate moisture in the soil, the leaves on a healthy sun loving plant should not become scorched. On a normal mild summers day, a well grown tomato plant is likely to use four to six litres of water a day.

However, when temperatures spike, water use also spirals and the tomato plants may use 8-12 litres to avoid stress.

Similarly, a medium sized fruit tree with an average sized crop, two to three weeks away from harvest, may use 100 to 300 litres of water a day under normal conditions but soak up double this amount under high heat.

Most determine their plants' water needs on a time basis, i.e. sprinklers set to run for 20 minutes twice a week or drippers for two hours once a week. However, it is far more efficient to identify how many litres different plants need on a daily or weekly basis.

The following guide, was published in this column during the recent drought and can be used as a home garden watering guide.

Tip: The amount of moisture absorbed by a healthy plant can be two



PICK YOUR METHOD: Volumes need from Lo-Flo sprinklers will be different to other forms of watering.

to four times greater than one struggling. In this case, the plant will use more water, but it will be in a much sounder position to keep itself cool.

When you water by time, it is important to realise the amount of water available from these systems varies considerably.

Standard dripper hose: Two litres per hour

Pressure compensating trickler: 25 litres per hour

Lo Flo sprinkler: 300 litres per hour
Standard (hole in centre) sprinkler: 1500 litres per hour

In this case, the time needed to water

the tomato plant, referred to earlier, will vary dramatically.

Tip: The key to preventing heat stress during extended hot weather is to make sure there is plenty of moisture in the plants root system at all times.

In most, but not all, situations watering more often is far more efficient and effective than retaining your existing watering frequency but watering for a longer period.

Longer vs more often

The aim, when watering, should be to apply enough water to soak the plant's

root zone. If you water longer, much of the additional moisture will soak below the root system and be lost.

On the other hand, watering more often will return moisture to the root zone before reserves are depleted.

As a general rule, plants with a shallow root system, i.e. vegetables and flowers, need more frequent watering than those with a deep root system, i.e. large shrubs and trees.

After three or four days of above average temperatures, soil moisture levels within the root zone will be very low and unless significant rain is forecast, it should be restored quickly.

WEEKLY REMINDERS

■ **Vegetables:** Summer growing salad vegetables such as lettuce, spring onions and carrots will mature quickly if sown this month. Seed of slow growing winter vegetables such as broccoli, cabbage and sprouts can also be sown over the next few weeks. It is best to delay the transplanting of vegetables while the weather remains hot. Try to time this operation to coincide with a forecast spell of cool weather. And if sowing seeds, cover the soil very thinly with a light mulching material.

■ **Fertiliser:** Keep vegetables and flowers growing quickly by applying a fortnightly application of liquid fertiliser. For best effects, water the plants the day before. Never apply fertiliser to plants when the soil is dry.

■ **Mites:** Small red spiders – known as mites – are breeding rapidly on many fruit trees, roses and vegetables such as tomatoes, egg fruit, cucumbers and zucchinis. In large numbers, they can cause serious damage. Spray the leaves thoroughly with a wettable or liquid sulphur (not on hot days) or soap based products (Natursoap).

■ **Nut grass:** This persistent weed thrives in the warm weather. But this is also a very effective time to control it by spraying with a weedicide containing glyphosate. Wait until the plants are fully grown before spraying or wiping with the chemical.

■ **Lawn:** During summer, you can leave the catcher off the mower if the grass is cut regularly. The clippings, wither quickly and act as a mulch on the soil.

■ **Drip irrigation:** One of the best ways of saving water in the garden, it can be installed by yourself and is relatively cheap.